

CASTLE PINES NORTH



METROPOLITAN DISTRICT

Board Meeting Agenda

Monday, October 28th, 2024, at 6:00 p.m.
7404 Yorkshire Drive, Castle Pines, CO 80108

CPNMD residents are welcome to participate either in person or via **Zoom**
To **Zoom** in, visit- www.cpnmd.org/board-meetings

- I. Welcome. Call meeting to order. Pledge of Allegiance.
- II. Roll call. Determination of quorum. Disclosure of potential conflicts.
- III. Consider approving the October 28th, 2024, Board Meeting agenda.
- IV. Consider approving the September 23rd, 2024, Board Meeting minutes.
- V. Consider approving the Wednesday September 18th, 2024, Special Work Session minutes.
- VI. Public comment period. (Three-minute maximum per person).
- VII. Filter Rehab Pilot Report, and Engineering Proposal. Greg Sekera P.E. & Erica Wirski, Kennedy Jenks.
 - a. Consider approval of Filter Rehabilitation Proposal.
- VIII. Daupler Demonstration and Presentation. Chad Feather, Daupler.
- IX. Communication Director's report.
- X. Finance Director's report.
 - A. Ratify claims for payment including check numbers 28828 -28904 and electronic payments issued from September 19, 2024 through October 22, 2024.

	September	October	Totals
Checks	\$ 491,275.54	\$ 3,046,867.51	\$ 3,538,143.05
Electronic Payments (all funds)	\$ 21,572.44	\$ 19,737.31	\$ 41,309.75
Total Expenditures	\$ 512,847.98	\$ 3,066,604.82	\$ 3,579,452.80

B. Approve payments to the City of Castle Pines for amounts due as of 12/31/23 per the IGA and 2023 audit.

	Amount
Storm Drainage	\$ 24,377
General / Parks and Recreation	\$ 1,381,405
Total Expenditures	\$ 1,405,782

- XI. Legal Counsel's report.
- XII. District Manager's report.
- XIII. Executive Session: Upon motion and affirmative vote of 2/3 of the Directors present, the Board may enter into executive session for the sole purpose of determining positions relative to matters that may be subject to negotiations; developing strategy for negotiations; and instructing negotiators intergovernmental agreements with water providers and evaluation and costs of professional contracts as allowed by Section 24-6-402 (4), C.R.S
- XIV. Board Action related to the executive session, if necessary.
- XV. Discuss necessity of November Study Session, or potential work session.
- XVI. Director's Matters.
- XVII. Adjourn.

**CASTLE PINES NORTH METROPOLITAN DISTRICT
REGULAR BOARD MEETING MINUTES
September 23, 2024 – 6:00 p.m.**

HELD: Monday, September 23, 2024 at 6:00 p.m.

ATTENDEES: Directors Jason Blanckaert, Leah Enquist, Jana Krell and James Mulvey were present. Nathan Travis, District Manager; Kim Seter, Seter, Vander Wall & Mielke; Phyllis Brown and Andrea Manion, CRS; Bailey Budnick, Elara Creatives; Russell White, Rubin Brown; and various members of the public were also present.

Absent: Tera Radloff

CONFLICTS: None.

QUORUM: Present.

CALL MEETING TO ORDER: The Regular Meeting was called to order at approximately 6:00 p.m.

CONSIDERATION OF AGENDA OF THE MEETING OF THE BOARD OF DIRECTORS: Upon motion by Director Mulvey, second by Director Enquist and unanimous vote, the meeting agenda was approved as presented.

CONSIDERATION OF PAST MEETING MINUTES: Upon motion by Director Mulvey, second by Director Enquist and unanimous vote, the Board approved minutes from the August 26, 2024 regular meeting and the September 18, 2024 special work session as presented.

PUBLIC COMMENT: Resident Steve Dawes pointed out that the August 26, 2024 regular meeting minutes erroneously stated that he had requested more time to review the 2023 budget amendment, when, in fact, Mr. Dawes had requested more time to review the auditor's report. The Board and Mr. Seter agreed to update the minutes to reflect Mr. Dawe's request at the August 26, 2024 regular meeting accurately.

COMMUNICATION DIRECTOR'S REPORT: Ms. Budnick presented her written report to the Board.

Responding to an inquiry from Director Enquist, Ms. Budnick reported that a communications survey will be sent to residents later in the year to assess the success of the District's outreach efforts. The District's scheduled emergency communication testing through Daupler will provide residents with an additional outlet for providing feedback on District communications.

Mr. Travis further explained that Daupler's emergency communication testing is scheduled for Wednesday and that the District's website and social media pages will be updated accordingly.

Ms. Budnick next discussed capabilities of the Daupler system and stated her intention to include information gathered through Daupler in her communications analytics going forward.

Director Mulvey requested that Ms. Budnick's reports include more information on the District's involvement with the East Plum Creek rehabilitation project. Ms. Budnick agreed. The Board then considered whether providing input on the communication director's report prior to its publication would be beneficial. Mr. Travis and Ms. Budnick agreed to formulate a plan for receiving feedback on the communication director's report in a manner that does not disrupt the District's workflow.

Responding to inquiries from Director Blanckaert and Director Mulvey, Mr. Travis clarified that Daupler is a physically-manned, after-hours emergency call response tool that provides residents with an avenue for reporting issues and emergencies outside of the District's normal operating hours and helps to streamline any associated service requests. The only people authorized to send emergency communications on behalf of the District are Mr. Travis, Ms. Budnick, the District's operations manager, and the District's lead operator.

FINANCE DIRECTOR'S REPORT:

Consider 2023 Budget Amendment Resolution: The Board re-convened the public hearing on the proposed 2023 budget amendment.

Mr. Travis read for the Board two comments received after the August 26, 2024 Board meeting and his responses to each. One comment from Mr. Michael Brisbois described difficulty understanding why a budget amendment is necessary. In his response, Mr. Travis thanked the resident for the feedback and invited him to discuss ways the District might increase transparency and make information more readily available. Mr. Brisbois declined Mr. Travis' invitation.

The second comment, received from Mr. Lance Mettler, requested a more consolidated approach to managing resources and suggested certain assets be controlled by the City of Castle Pines. Mr. Travis responded to the resident by thanking him for his feedback and clarifying that the purpose of the budget amendment is to account for changes in the District's financials as a result of an intergovernmental agreement in which the District transferred its parks, trails, open space and stormwater assets to the City of Castle Pines.

There being no further public comment, the Board closed the public hearing on the proposed budget amendment.

Upon motion by Director Blanckaert, second by Director Krell and unanimous vote, the Board approved the 2023 budget amendment as presented.

Consider Approval of 2023 Audited Financial Statements: Ms. Brown reminded the Board that the 2023 audited financial statements had been presented and reviewed at the last Board meeting. Ms. Brown then confirmed that no substantive changes had been made to the statements since the last Board meeting.

Upon motion by Director Blanckaert, second by Director Enquist and unanimous vote, the Board approved the 2023 audited financial statements.

Ratify Claims for Payment: Upon motion by Director Blanckaert, second by Director Krell and unanimous vote, the Board approved and ratified claims for payment including check numbers 28799-28827 and electronic payments issued from August 22, 2024 through September 19, 2024, for a total of \$508,843.64.

LEGAL COUNSEL'S REPORT: Mr. Seter delivered the legal counsel report, noting that the contract amount listed on his report for the sale of farm properties is much lower than it should be.

Mr. Seter reported that the Lagae family ranch parcels have been completed and will be sent to the City and easement grant holder for signature.

Responding to an inquiry from Director Enquist regarding the Hidden Pointe Metropolitan District ("Hidden Pointe") inclusion, Mr. Travis explained that he was able to establish communications with Hidden Pointe representatives and that he will be attending Hidden Pointe's upcoming Board meeting on October 15 to discuss the inclusion process and present Hidden Pointe's Board of Directors with various inclusion documents for consideration.

Assuming both boards approve the inclusion, the process should be complete by early 2025. The inclusion should not affect the District in any significant way financially.

DISTRICT MANAGER'S REPORT: Mr. Travis presented his report to the Board.

2025 Budget Timeline: Mr. Travis stated that he is working with Ms. Brown and Ms. Manion to complete the draft 2025 budget, which will be sent for the Board to review no later than October 15. Mr. Travis recommended that the Board hold the work session on Wednesday, October 23 to go over budget matters before the draft budget is presented at the regular October meeting. The Board agreed.

Capital Project Updates: Mr. Travis reported that work on the Monarch water line extension has begun and is going well. Mr. Travis anticipates that the waterline portion of the project will be complete in about 6-8 weeks, depending on weather conditions.

Mr. Travis reported that work has also commenced on the liquid ammonia sulfate project, which is expected to be complete by mid to late October. The project will relocate the District's ammonia sulfate chemical room, allowing for easier chemical deliveries and maintenance.

Mr. Travis informed the Board that the full switch over to Centennial Water & Sanitation District ("Centennial") may not be happening this year after all, citing Centennial's extensive water treatment plant upgrades. Mr. Travis will be meeting with Centennial to discuss the logistics of water delivery for this winter, although he anticipates the District will leave its water treatment plant on all throughout the winter and then go offline earlier than usual next summer.

Responding to an inquiry from Director Mulvey, Mr. Travis stated that routine annual flushing will occur sometime in late April or early May as usual. Flushing notices will be sent out to residents a month prior in billing inserts. Updates will also be available via the District's website, email and social media accounts. Daily updates are anticipated while annual flushing is ongoing to provide residents with up-to-date information on the location of work crews.

Director Enquist suggested the District host a town hall event during the annual flushing to address resident concerns and answer questions. Mr. Travis stated that he and Ms. Budnick would be open to hosting such an event. Director Enquist then suggested the District provide residents with the means to submit questions and comments ahead of time so that the Board may prepare and residents who may be unable to attend can have their concerns addressed.

Mr. Travis next discussed the status of the well vault rehab project, noting that the pre-construction meeting was held last week. The project will provide much-needed upgrades to the District's well-sites and will not impact the actual wells themselves, but rather the metering and control vaults of the wells.

Mr. Travis then informed the Board that the rate study is currently in progress after facing delays due to issues with the finalization of the District's audit and issues with the transmission of pertinent billing data.

Finally, Mr. Travis reported that the Castle Rock Plum Creek Water Purification Facility tour is currently scheduled for September 30, 2024, although the meeting time may vary.

DIRECTOR'S MATTERS: Director Enquist expressed concern with the amount of time that residents are permitted to provide public comment at meetings and suggested the time allotment be extended from three to five minutes per person. After discussion, the Board determined to retain its three-minute limit with the understanding that the Board may allow for up to five minutes of public comment per person when time permits. Mr. Travis asserted that he is always available to answer resident questions and concerns outside of the public comment period as well.

Director Mulvey expressed concern regarding the lack of compressor at the District's interconnect pump station. Mr. Travis assured the Board that he is working diligently to resolve the issue as quickly as possible.

ADJOURN: The regular Board meeting adjourned at approximately 7:04 p.m.

DRAFT



Kennedy Jenks

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CPN Filter Pilot Final Report

7 October 2024

Prepared for

Castle Pines North Metropolitan District

7404 Yorkshire Dr.
Castle Pines, CO 80108

KJ Project No. 2346062

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List of Acronyms

- gpm – gallons per minute
- sf – square foot, ft²
- PLC – programmable logic controller
- scfm – standard cubic feet per minute
- UFRV – unit filter run volume

Section 1: Introduction

1.1 Introduction

The Castle Pines North (CPN) Water Treatment Plant (WTP) is a 5.2 MGD direct filtration plant originally constructed in 1988. The WTP is owned and operated by Castle Pines North Metropolitan District (District). Since its original construction, the plant has undergone multiple upgrades. These upgrades continue to improve treatment efficacy and operations of the plant. One of the proposed upgrades includes rehabilitation to the plant’s filter beds to improve filtration media performance and increase the plant’s capacity. A filtration pilot study was performed, as described in *Filtration Pilot Test Plan* (June 2024), to assist in media selection, inform operational strategy, prove achievability of treatment capacity, and fill raw water and finished water quality data gaps with current operations.

CPN groundwater is pulled from a combination of ten (10) wells with two or three in operation at any given time. Eight of these wells pull from the Arapahoe Basin while the other two wells pull from the Denver Basin. The Arapahoe Basin tends to have high water quality while the Denver Basin is shallower and provides slightly more variable water quality. One challenge that CPN faces is that the well systems are not designed to flush, so during a typical well start-up, the WTP will receive and treat a slug of poorer water quality for a short duration.

The purpose of this memorandum is to provide data from the pilot study to support media selection and a plant capacity increase from 5.2 MGD to 7 MGD. CPN’s primary contaminants are iron and manganese. Radium is also considered due to its presence in the backwash water and potential for accumulation on media. These contaminants were targeted for removal through the study. Filter performance was assessed relative to the goals outlined in the *Filtration Pilot Test Plan* (June 2024).

1.2 Current Operational Strategy

Selected operational parameters for the plant’s six existing filters are shown in Table 1-1. Filters 1 and 2 are rated to operate at 6.8 gpm/sf while filters 3-6 are rated to operate at 4.9 gpm/sf. Filters 1 and 2 are original to the plant while filters 3-6 were added on in subsequent plant upgrades.

Table 1-1: CPNMD Current Filter Ratings and Operational Parameters

		Filter 1	Filter 2	Filter 3	Filter 4	Filter 5	Filter 6
Filter Media		mixed	mixed	mixed	mixed	mixed	mixed
Filter Rating	<i>gpm</i>	750	750	540	540	540	540
Filter Length	ft	10.5	10.5	10.5	10.5	10.5	10.5
Filter Width	ft	10.5	10.5	10.5	10.5	10.5	10.5
Filter Depth	ft	10	10	10	10	10	10
Filter Bed Depth ¹	in	40	40	40	40	40	40
Max Hydraulic Loading Rate	<i>gpm/ft²</i>	6.80	6.80	4.90	4.90	4.90	4.90

		Filter 1	Filter 2	Filter 3	Filter 4	Filter 5	Filter 6
Backwash Flow Rate (approx.)	<i>gpm</i>	800	800	800	800	800	800
Sodium Hypochlorite Dosing (approx.)	<i>mg/L</i>	1.6	1.6	1.6	1.6	1.6	1.6

1. Filter bed depth includes support gravel and filter media

Filter bed depth is approximately equal across all filters. Backwashes are triggered when headloss reaches approximately 8 feet, or on a time basis (~ 48 hours). Sodium hypochlorite is dosed to maintain a residual between 1-1.5 mg/L. The existing media and filter-media support gravel are approximately 40 inches deep and comprised of a mixture of gravel and sand.

Existing Media:

- 3 inches of 3/4" x 3/8" gravel
- 2 inches of 3/8" x 3/16" gravel
- 2 inches of 3/16" x 1/8" gravel
- 3 inches of garnet gravel
- 4 inches of garnet sand
- 9 inches of sand
- 15-17 inches of anthracite

The existing media is between 10-15 years old and is in need of replacement along with other components of the plant's filtration system.

1.3 Pilot Goals

1.3.1 Water Quality Goals

Water quality goals were set forth in the *Filtration Pilot Test Plan* (June 2024) based on preliminary raw water sampling indicating the following constituents of interest: iron, manganese, and combined radium. Initially, pH was also included, but pH adjustment was not necessary as the influent plant pH fell within the target range of 7.2 to 8.5. While iron and manganese do not currently have required maximum contaminant levels (MCLs), secondary MCLs (SMCLs) are provided by the EPA for these constituents. It should be noted that the EPA is re-evaluating regulation of manganese and has lowered the Health Advisory Level. Health Canada has established a maximum acceptable concentration of 0.12 mg/L due to neurological effects in children. The limit of 0.05 mg/L for manganese was established by the US Public Health Service based on the analytical and treatment capabilities of the time. Literature recommends even lower concentrations than SMCLs for iron and manganese to target color, porcelain fixture staining, and odor issues. Combined radium-226 and -228 are the only constituents listed that are governed by MCLs. Suggested treated water quality goals are presented in Table 1-2 based on MCLs, SMCLs, and values found in literature.

Table 1-2: Pilot Study Filtered Water Quality Goals

Parameter	Water Quality Goal	MCL	SMCL
Total Iron	≤ 0.05 mg/L ¹	-	0.3 mg/L
Total Manganese	≤ 0.015 mg/L ¹	-	0.05 mg/L
pH	7.2 - 8.5	-	6.5 - 8.5
Radium 226 & 228	sum <5 pCi/L	sum <5 pCi/L	-

Note: MCL = maximum contaminant level
 SMCL = secondary maximum contaminant level
 mg/L = milligrams per liter
 µg/L = micrograms per liter

Full scale operational strategy is expected to be governed primarily by manganese removal. Iron is oxidized by sodium hypochlorite and removed through filtration. However, due to its slow oxidation rate with chlorine, manganese is primarily removed via adsorption by manganese oxide on the surface of the filter media and then is catalytically oxidized. Approximately 75% removal of both iron and manganese will be required to meet the suggested treatment goals.

Combined radium results have exceeded the MCL in CPN influent water at their maximum levels. However, this occurred during a single sampling event while the MCL is based on an annual average. Radium removal and residuals management was considered in media selection and development of operational strategy. CPN currently disposes of its residuals via landfill due to elevated levels of technologically enhanced naturally occurring radioactive material (TENORM). It is not anticipated that results from the study will change the District’s need to dispose of residuals offsite. This pilot study aimed to gain a more holistic understanding of the transport of TENORM in the raw water through the WTP, and to use this information to inform the media selection for the forthcoming filter rehabilitation project.

1.3.2 Operational Goals

In addition to meeting the water quality goals stated above, a principal consideration in the development of this study was to test media operations and efficacy at higher flow rates than are typically found in gravity media filters. CDPHE’s Design Criteria for Potable Water Systems Section 4.3.1.2² indicates a maximum flow rate of 5 gpm/sf for rapid rate gravity filters. Further testing is required for approval to exceed this rate.

The District is seeking approval for a plant capacity rating of 7 MGD in order to meet its projected 10-year buildout flow. The filters are a major component of plant operations that could potentially bottleneck capacity. A 7 MGD capacity corresponds to a filter rating of approximately 810 gpm per filter or 7.35 gpm/ft² with all filters running simultaneously. Viability of filter media at this flow rate was determined in this study as meeting a unit filter run volume (UFRV) of at least 5000 gal/sf for that flow condition. UFRV is further defined and discussed in Section 3.2.2.

An ancillary goal of proving viability of filter media at higher flow rates was to optimize backwash strategy to achieve longer filter run times. One issue that can reduce filter run times and waste water is filter prolonged filter ripening. Filter ripening refers to the “break-in” period that occurs

¹ Guidance for the Treatment of Manganese, Water Research Foundation (2013)

² Design Criteria for Potable Water Systems, CDPHE (2022)

when more particles are captured on the media, leading to improved filter performance. When this process takes longer than necessary, reduced performance immediately after backwash is observed and more water is wasted before optimal removal of target constituents is reached. A portion of this study was dedicated to optimizing backwashes to provide a starting point for the plant to use when media is installed at the full scale.

Additionally, one of the stated operational goals of the study was to analyze CPN's current oxidation strategy to determine if modification was necessary. After performing initial research, it was determined that maintaining the plant's current filter pre-oxidation strategy (sodium hypochlorite) was in the best interest of the plant from an ease of operation, capital investment, and efficacy perspective. The plant's relatively low influent levels of iron and manganese do not necessitate further investigation of a stronger oxidant. Thus, oxidant selection and dosing were not investigated further.

Section 2: Means and Methods

2.1 Testing Summary

Pilot testing was performed over the course of twelve (12) weeks using an Intuitech® Pilot Filtration System. The pilot system is comprised of four 6” diameter filter columns with individual feed pumps, a backwash tank and backwash pump, air compressors for pneumatic valves and air scour, and various instruments including pressure, level, and temperature sensors. Operation of the pilot is accomplished using the online SCADA system. Additional detailed information on the skid system can be found in the *Filtration Pilot Test Plan* (June 2024) and Intuitech® Operation & Maintenance Manual.

The raw water was dosed with sodium hypochlorite at a rate of approximately 1.5 – 3.5 mg/L using the integrated chemical feed system on the pilot skid. The experimental matrix for pilot filtration testing is presented in Table 2-1. Hydraulic loading rates were selected around a target of 7.35 gpm/sf. Data at the 4 gpm/sf and 6 gpm/sf conditions were collected to simulate flows that the filters would experience during lower demand periods. Finally, the 10 gpm/sf was selected to provide an additional data point at high flow and understand the practical limits of each media.

Table 2-1: Experimental Matrix for Granular Media Pilot Testing

Run	Chemicals Fed	Hydraulic Loading Rate (gpm/sf)	Approx. Duration (days)
1	Sodium Hypochlorite	4	12
2	Sodium Hypochlorite	6	12
3	Sodium Hypochlorite	7.35	18
4	Sodium Hypochlorite	10	12
5	Sodium Hypochlorite	7.35*	12

*Filter #4 (Anthracite and GreensandPlus) was run at 10 gpm/ft² during second half of run 5 due to incomplete data from run 4.

The system operated Monday-Friday with Kennedy/Jenks staff on-site during working hours. During the first nine weeks of full operation, the system was left to operate automatically through weekends. Each round for the first few weeks testing the 4 gpm/ft², 6 gpm/ft², 7.35 gpm/ft², and 10 gpm/ft² scenarios began on Mondays, lasted two weeks, and concluded on a Friday. An exception was made for the 7.35 gpm/ft² scenario, running for three weeks due to issues with maintaining raw water flow from the full-scale plant. The system was turned offline over the weekends between each round.

Run #5 focused on backwash operational strategy, maintaining a 7.35 gpm/ft² flow rate. All three weeks ran consecutively, including weekends, with no intentional system shutdown. Sampling and operation followed the same schedule as the first nine weeks of the study (Monday-Friday, working hours, 1-2 staff on-site at a time).

Backwash cycles were performed automatically based on the filter reaching 8 ft of headloss or filtered water turbidity set max value, whichever came first. Max filtered water turbidity triggers

were set between 0.5 and 1 NTU throughout the study to provide insight into control strategies for the full scale plant.

2.2 Filter Media

Start-up of the filter pilot included delivery and set up of filter columns and media conditioning with potassium permanganate. Four media configurations were selected for testing: Anthracite / GreensandPlus, GreensandPlus, Anthracite / Sand, and Pyrolox Advantage. Parameters for these media configurations are shown in Table 2-2.

Table 2-2: Pilot Filter Media

Parameter	Filter 1	Filter 2	Filter 3	Filter 4
Top Media	Anthracite	--	Anthracite	--
Depth (inches)	21	--	20	--
Effective size (mm)	0.60 – 0.80	--	0.9 – 1.1	--
Uniformity coefficient	< 1.60	--	1.30-1.60	--
Specific gravity	1.60± 0.1	--	1.60± 0.1	--
Bottom Media	GreensandPlus	GreensandPlus	Sand	Pyrolox Advantage
Depth (inch)	15	30	15	46
Effective size (mm)	0.30 - 0.35	0.30 - 0.35	0.45-0.55	0.56±
Uniformity coefficient	< 1.6	< 1.6	1.30-1.65	1.5
Specific gravity	2.4	2.4	2.6	
Total L to d ratio	1900	2300	1400	2100

Notes: L to d = ratio of media depth to effective size

Anthracite / GreensandPlus was selected for testing because this configuration is an industry standard and is known to have high performance for removal of iron and manganese. A column with GreensandPlus alone was selected for testing due to potential for anthracite interference with the sludge collector in the backwash tank. The potential for interference could make it advantageous for the plant to avoid the use of anthracite. An anthracite / sand column was selected due to the reduced cost and durability of this configuration. Finally, Pyrolox Advantage was selected as an alternative manganese oxide coated media with potentially better headless characteristics compared to more traditional GreensandPlus media. Media selection is discussed in depth in *Filtration Pilot Test Plan* (June 2024).

2.3 Backwashing

The PLC performs backwash cycles using the sequence below. A backwash sequence begins with draining the water to just above the filter media surface, air scour, followed with simultaneous air scour and water wash, and finishes with a water wash (without air scour) to achieve a bed expansion between 30 and 40 percent. The filter then settles for 5 minutes. This backwash strategy is termed *Simultaneous Air Scour and Water Backwash During Rising Level Before Overflow*³ and is recommended for gravity media filters.

³ Water Quality and Treatment Handbook (6th Addition), AWWA

- Air Scour:
 - Time Step: 120 sec
 - Air flow: 0.6 scfm (3 scfm/sf)
- Air Scour/Backwash:
 - Fill Level: 15 cm / 6in below the overflow level
 - Low Rate Backwash flow: 3 gpm
 - Air flow: 0.6 scfm
- Backwash:
 - Time Step: 300 sec
 - High Rate Backwash flow:
 - 2.35 gpm (16 gpm/sf Filter #3) or
 - 3.15 gpm (12 gpm/sf Filters #1, #2, #4)
- Settle:
 - Time Step: 300 sec

2.4 Chemical Dosing

The plant currently practices maintaining a chlorine residual of 1-1.5 mg/L in filtrate. This strategy conforms to recommended pre oxidation strategy stated in literature to provide sufficient oxidant for continuous regeneration of manganese oxide coating on media.

Similarly, the raw water entering the pilot filter was dosed with sodium hypochlorite (NaOCl) to maintain a residual of approximately 1-1.5 mg/L in the filtrate. Throughout the study, dosing ranged from 1.5-3.5 mg/L to achieve the target chlorine residual. Daily free and total chlorine analyses were performed for each column's effluent, and dosing rate was adjusted as needed, to achieve a chlorine residual of ~1-1.5 mg/L.

The *Filtration Pilot Test Plan* (June 2024) outlined testing with potassium permanganate (KMnO₄) for preoxidation during weeks 9-12 of the study. The decision to remove KMnO₄ dosing during weeks 9-12 of the study was the result of discussions with plant operators on treatment benefits, applicability, and operational involvement required. No KMnO₄ was dosed through the duration of the study. Although KMnO₄ was used to condition the media prior to starting the study, this was drained and disposed before filling the columns.

2.5 Sample Collection

Daily samples were collected throughout the pilot study period. The sampling schedule began by following the proposed sampling plan in the *Filtration Pilot Test Plan* (June 2024) but was modified based on the evaluation of ongoing data from onsite testing, pilot system records, and Colorado Analytical Laboratory (CAL) results. The Sampling and Analysis Plan presented in Table 3-1 reflects sampling completed throughout the study.

Online data represents data collected via sensors integrated with the pilot system. On-site analyses were performed using a pH meter and HACH test kits (iron, manganese, free and total chlorine). Samples for all other parameters were collected and shipped to a certified lab for analysis.

Table 2-3: Sampling and Analysis Plan

Parameter	Raw	Filtrate	Backwash Supernatant
Online Data:			
Flow rate (gpm)		online	
Head loss (ft)	8 / study	online	
Turbidity		online	
Temperature (°C)	online		
On-Site Analyses:			
Iron, Manganese	3 / week	3 / week	
Chlorine Residual ^(a)		2 / day	
pH ^(b)	1 / day		
Certified Lab:			
Iron, Manganese	3 / week	3 / day	
Ammonia	3 / week	3 / week	
TENORM ^(c)	8 / study	8 / study	3 / study
Total organic carbon	2 / study	2 / study	
Inorganics ^(d)		2 / study	3 / study
PFAS		2 / study	

Note: (a) Chlorine residual testing included free and total chlorine
 (b) pH measured before and after addition of chlorine to the raw water.
 (c) Includes Uranium, Radium 226 and Radium 228
 (d) Includes fluoride, nitrate/nitrite, calcium, magnesium, arsenic, color, turbidity, chloride, sulfate, total dissolved solids, conductivity, reactive silica, total phosphorus, alkalinity

Section 3: Discussion

3.1 Influent Water Quality

Influent water quality at the WTP varies primarily due to well start up and changeover. The WTP typically runs on an annual basis from May 1st through October 1st, remaining offline for the offseason (October through April). Startup began with Well A-1 on April 15th to provide supply to the pilot. At this time, poor water quality, indicated by higher turbidity levels, was observed visually and in the data. During May and June, several other wells were run intermittently, including the following: A-1, A-2, A-3, A-4, A-6, DE-6, and A-7. Note that of the eight wells ran during the pilot phase, seven were part of the Arapahoe basin and one was from the Denver Basin (DE-6). A summary of well usage during the study is provided below.

- A-1: April 15th – June 6th, June 13th – 30th
- A-2: May 20th – 21st, 23rd – 28th
- A-3: May 2nd – 5th, May 6th – June 30th
- A-4: May 31st – June 13th, June 27th – 30th
- A-6: May 29th – June 27th
- DE-6: May 21st, May 28th – June 30th
- A-7: June 7th – 30th

Well start-up has been linked to spikes in turbidity reaching the plant and filters in the past. Filter performance across all influent water quality conditions is discussed further in the subsequent sections. However, it is noted that turbidity spikes during well start up are an issue at the plant and the District intends to investigate solutions for this issue in the forthcoming full scale filter beds rehabilitation project. One potential solution includes adding capability to pump raw water to waste during well startup.

Influent water quality data is presented in Table 3-1 below. Initial sampling for these parameters is provided in the *Filtration Pilot Test Plan* (June 2024). Further sampling was completed as a part of this study to confirm preliminary results and provide a baseline for filter performance.

Table 3-1: CPN Combined Influent Sampling Results

	pH	Ammonia mg/L as N	Iron mg/L	Manganese mg/L	Turbidity NTU	Silica mg/L as Si
Average	7.24 ¹	0.123	0.513	0.078	1.4	6.0
Maximum	8.03	0.155	1.700	0.910	4.9	6.7
Minimum	7.16	0.060	0.037	0.046	0.5	4.9

1. Value for pH is median, not average

Ammonia, which can act as a scavenger for oxidant, remained consistent with previous sampling results. Fluctuation in ammonia, iron, and manganese influent levels contribute to changes in oxidant demand. More extensive sampling of iron and manganese yielded slightly elevated levels compared to sampling that was performed prior to pilot plan development. It was originally estimated that both iron and manganese required approximately 75% removal to meet CPN water quality goals. These new data indicate that 80% of manganese and 90% of iron need to be removed to meet CPN’s water quality goals (Table 1-2). Turbidity and silica also remained consistent with previous sampling. Further discussion of turbidity and silica is provided in sections 3.2.1 and 3.6 respectively.

3.2 Media Turbidity and Headloss Characteristics

3.2.1 Turbidity

Turbidity levels are shown in Table 3-2 for the 7.35 gpm/sf (target) flow condition. Turbidity was not set as an initial goal for the study; however, operations personnel indicated that turbidity above 0.2 NTU is generally considered undesirable. Additional data were collected across all flow conditions but are not included in this report for brevity and due to issues with calibration of turbidimeters later in the study.

Table 3-2: Average Effluent Turbidity Levels at 7.35 gpm/sf Flow Condition

	Turbidity (NTU)
Anthracite / GreensandPlus	0.11
GreensandPlus	0.07
Anthracite / Sand	0.16
Pyrolox Advantage	0.17

Generally, the GreensandPlus Column performed best for turbidity removal followed by GreensandPlus / anthracite, anthracite / sand, and Pyrolox Advantage media. It should be noted that all columns except the Anthracite / Sand Column experienced prolonged filter ripening prior to backwash optimization in the final weeks of the study. Turbidity values during the filter ripening period skewed the data for these columns such that they appear to have higher average values for filtrate turbidity. This phenomenon is evident Figures 1-4 in Appendix B.

3.2.2 Headloss Characteristics

Unit filter run volume (UFRV) is used to compare the unit filtered water production in a filter run. Headloss was used to determine the length of the filter run in the tested columns. UFRV measures the volume of water filtered before backwash and is calculated using Equation 1 below.

$$UFRV = \frac{GPM}{ft^2} * Runtime (hrs) * \frac{60 min}{1 hr}$$

Equation 1:UFRV Calculation

UFRVs for the various filter runs are summarized in Table 3-3 below. Runtimes for each flow condition are based on headloss curves produced using the pilot’s online pressure sensor. Examples of the headloss curves used to produce UFRV values are provided in 1-4 in Appendix B for the 7.35 gpm/sf flow condition. These graphs are a visual representation of the data below. The pilot plant does not calculate runtimes directly.

Issues during start up in the first phase of the project (flow condition 4 GPM/sf) prevented accurate UFRVs from being calculated for that flow condition. A UFRV above 5,000 gal/sf is generally considered acceptable for gravity filters and was targeted as a performance goal for these media.

Table 3-3: UFRVs for all Columns and Flow Conditions (gal/sf)

	4 gal/sf ¹	6 gal/sf	7.35 gal/sf	10 gal/sf	7.35 gal/sf ³
Anthracite / GreensandPlus	--	8,672	5,011	2,650	7,622
GreensandPlus	--	1,169	720	922	1,574
Anthracite / Sand	--	17,280	4,954²	14,400	19,123
Pyrolox Advantage	--	2,880	1,728	1,512	1,870

- 1) UFRVs could not be calculated accurately for the 4 GPM/sf flow condition due to issues during startup leading to inconsistent data for headloss
- 2) Turbidity (0.5 NTU) was used as a trigger for backwash during this flow condition resulting in frequent backwashing and reduced performance relative to other test runs.
- 3) Second 7.35 GPM/sf flow condition represents calculated UFRVs after backwash optimization occurred

The anthracite / GreensandPlus column met the 5,000 gal/sf performance goal across all flow rates tested except for the 10 gpm/sf flow condition. Again, this flow condition was evaluated for qualitative purposes to understand the limits of the filters, but the plant is not intended to operate at 10 gpm/sf.

The GreensandPlus column without anthracite fell below 5,000 gal/sf for all of the conditions tested and is therefore not a viable option for implementation at the plant. Without the anthracite cap, the GreensandPlus column experienced dramatic headloss and frequent backwashing. If implemented, this would result in excessive water consumption and reduced performance.

The anthracite / sand column generally exceeded the 5,000 gal/sf requirement across all flow conditions except the 7.35 gpm/sf condition. During the study, backwash triggers were adjusted occasionally to see if performance improved. The anthracite / sand column was not backwashing on headloss alone, so turbidity was used as a trigger during the 7.35 gpm/sf flow condition. This resulted in extremely frequent backwashing and reduced performance. This is why the 7.35 gpm/sf flow condition is lower than all other conditions for this column. Overall, the anthracite / sand column had the best performance in terms of reduced headloss. This outcome is expected due to its larger particle size relative to the other medias tested.

Finally, the Pyrolox Advantage media did not achieve UFRVs greater than 5000 gal/sf across any of the flow conditions but did exceed the UFRV of the GreensandPlus media alone. This media was not tested with an anthracite cap, therefore it could experience improved headloss

characteristics if an anthracite cap were employed. However, the Pyrolox Advantage media alone does not meet the required UFRV criteria and therefore will not yield high enough performance for this application.

Additionally, it is noted that the backwash optimization performed at the end of the study resulted in improved UFRVs across all media at the targeted 7.35 GPM/sf flow condition.

3.3 Media Performance for Iron and Manganese Removal

Influent and filtrate concentrations were used to estimate iron and manganese removal for column performance evaluation.

Occasionally, filter columns exhibited spikes in iron and manganese upon filter pilot start up. These spikes were not present when the columns were running consistently and are presumed to be due to chlorine residual being consumed resulting in a drop in ORP and release of Fe and Mn.

Additionally, it should be noted that many samples included in the study were valued at below the detection limit. For these samples, the method detection limit was entered in place of a measured value. This approach is conservative, indicating that performance in terms of iron and manganese removal may be higher than results suggest. Data were reviewed and omitted where an explanation could be provided for inconsistent values.

The following terms are used in the following discussion and are defined below for clarity:

- Mean – arithmetic mean (average is often used interchangeably)
- Standard deviation (s) – measure of the variation in a set of values
- Mean + 2s – Mean added to two times the standard deviation – represents the distribution under which 95% of values fall.
- Goal – CPN water quality goals were 0.05 mg/L and 0.015 mg/L for iron and manganese respectively. Values higher than these goals are **bolded** in the tables below.
- SMCL – Secondary Maximum Contaminant Limits (SMCLs) are set by EPA and are less stringent than CPN goals. There are no values for iron and manganese that are higher than the SMCL in the tables below.

3.3.1 Anthracite / GreensandPlus Column

Performance for Anthracite / GreensandPlus Column in terms of iron and manganese removal is presented in Table 3-4.

An iron level below 0.05 mg/L was targeted in filtrate. The anthracite / GreensandPlus column exceeded this goal with average levels 0.006-0.007 mg/L of iron exiting the column. Mean + 2s values were between 0.011 and 0.013 mg/L indicating that at least 95% of the data are below the target concentration.

A manganese level below 0.015 mg/L was targeted in filtrate. The anthracite / GreensandPlus column exceeded this goal with average levels between 0.001 and 0.005 mg/L of manganese exiting the column. Mean + 2s values also fell below the target, indicating that 95% of the manganese levels are below the 0.015 mg/L goal for this column.

Table 3-4: Anthracite / GreensandPlus Column Effluent Iron and Manganese Concentrations

Iron (mg/L)					
	<i>4 GPM/ft²</i>	<i>6 GPM/ft²</i>	<i>7.35 GPM/ft²</i>	<i>10 GPM/ft²</i>	<i>BW testing</i>
Mean	0.005	0.006	0.006	0.007	0.006
Mean + 2s	0.005	0.013	0.013	0.013	0.011
Manganese (mg/L)					
	<i>4 GPM/ft²</i>	<i>6 GPM/ft²</i>	<i>7.35 GPM/ft²</i>	<i>10 GPM/ft²</i>	<i>BW testing</i>
Mean	0.001	0.002	0.002	0.002	0.002
Mean + 2s	0.004	0.010	0.009	0.005	0.009

Overall, the anthracite / GreensandPlus Column met or exceeded the effluent water quality goals for iron and manganese. Iron and manganese effluent concentrations were approximately 88% and 80% lower than target on average, respectively.

3.3.2 GreensandPlus Column

Performance for the GreensandPlus column in terms of iron and manganese removal is presented in Table 3-5.

An iron level below 0.05 mg/L was targeted in filtrate. The GreensandPlus Column exceeded this goal with average levels 0.005-0.012 mg/L of iron exiting the column. Mean + 2s values were between 0.005 and 0.012 mg/L for all flow conditions except the 4 gpm/ft². The distribution of iron measurements exceeds the target of 0.05 mg/L for the 4 gpm/ft² condition.

A manganese level below 0.015 mg/L was targeted in filtrate. The GreensandPlus column exceeded this goal with average levels between 0.001 and 0.007 mg/L of manganese exiting the column. Mean + 2s values also fell below the target for all flow conditions except the 4 gpm/ft² (0.045 mg/L). At the 4 gpm/ft² flow condition, the distribution reaches significantly higher than the goal of 0.015 mg/L but still under the SMCL of 0.05 mg/L.

Table 3-5: GreensandPlus Column Effluent Iron and Manganese Concentrations

	Iron (mg/L)				
	4 GPM/ft ²	6 GPM/ft ²	7.35 GPM/ft ²	10 GPM/ft ²	BW testing
Mean	0.006	0.005	0.006	0.005	0.005
Mean + 2s	0.014	0.006	0.012	0.005	0.005
	Manganese (mg/L)				
	4 GPM/ft ²	6 GPM/ft ²	7.35 GPM/ft ²	10 GPM/ft ²	BW testing
Mean	0.003	0.001	0.002	0.001	0.001
Mean + 2s	0.015	0.001	0.010	0.003	0.002

Overall, the GreensandPlus column performed well for iron and manganese removal across all flow rates. Average levels of iron and manganese were well below the plant goals and distribution of the data also generally exceeded plant goals. Only in the 4 gpm/ft² flow condition did the distribution not reach plant goals while still falling below the SMCL.

One possible explanation for this is that some short circuiting of the column may have occurred at this low flow during startup of the pilot. Additionally, as discussed in subsequent sections, this column experienced high headloss with few backwashes during the early stages of the study.

3.3.3 Anthracite / Sand Column

Performance for the anthracite / sand column in terms of iron and manganese removal is presented in Table 3-6.

An iron level below 0.05 mg/L was targeted in filtrate. The anthracite/sand filtrate generally met this goal except for the 6 GPM/ft² condition which had an average of 0.06 mg/L. The distribution of data (Mean + 2s) generally did not meet this goal across all flow conditions but remained under the SMCL.

A manganese level below 0.015 mg/L was targeted in filtrate. Average manganese levels in anthracite / sand filtrate met this goal for all flow conditions. The distribution of data (Mean + 2s) generally breached this goal across all flow conditions with the exception of the 10 gpm/ft² condition which remained on target with this goal.

Table 3-6: Anthracite / Sand Column Effluent Iron and Manganese Concentrations

	Iron (mg/L)				
	4 GPM/ft ²	6 GPM/ft ²	7.35 GPM/ft ²	10 GPM/ft ²	BW testing
Mean	0.029	0.070	0.030	0.016	0.022
Mean + 2s	0.172	0.250	0.123	0.069	0.138
	Manganese (mg/L)				
	4 GPM/ft ²	6 GPM/ft ²	7.35 GPM/ft ²	10 GPM/ft ²	BW testing
Mean	0.006	0.012	0.006	0.004	0.005
Mean + 2s	0.020	0.040	0.038	0.012	0.025

Overall, anthracite / sand media generally did not meet CPN performance goals but did remain under EPA's SMCLs for both iron and manganese. However, there is potential for a manganese dioxide coating to continue to form in situ with sufficient oxidant (sodium hypochlorite) and

influent manganese. This is the only column tested in this study with media which is not produced with a manganese dioxide coating. The in situ formation of a manganese oxide coating will likely improve performance over time for iron and manganese removal but could not be confirmed for this specific water matrix due to the relatively short duration of this study.

Another component of performance for this column is media size. The anthracite / sand column has the lowest filter bed depth to grain size ratio (L/d ratio) of the medias tested. This typically results in lower removal of target constituents but tends to improve headloss characteristics. Lower removal of iron and manganese but improved headloss characteristics (as discussed in Section 3.2.2) relative to other columns were expected outcomes from the study.

3.3.4 Pyrolox Advantage Column

Performance for Pyrolox Advantage column in terms of iron and manganese removal is presented in Table 3-7.

An iron level below 0.05 mg/L was targeted in filtrate. Average and distributed iron levels in the Pyrolox Advantage filtrate met this goal across all flow conditions.

A manganese level below 0.015 mg/L was targeted in filtrate. Average manganese and distributed manganese levels in the filtrate met this goal across all flow conditions.

Table 3-7: Pyrolox Advantage Column Effluent Iron and Manganese Concentration

	Iron (mg/L)				
	4 GPM/ft ²	6 GPM/ft ²	7.35 GPM/ft ²	10 GPM/ft ²	BW testing
Mean	0.005	0.006	0.010	0.012	0.006
Mean + 2s	0.005	0.012	0.031	0.049	0.014
	Manganese (mg/L)				
	4 GPM/ft ²	6 GPM/ft ²	7.35 GPM/ft ²	10 GPM/ft ²	BW testing
Mean	0.001	0.001	0.002	0.003	0.002
Mean + 2s	0.001	0.002	0.010	0.012	0.009

Generally, the Pyrolox Advantage media performed optimally for both iron and manganese removal, meeting or exceeding water quality goals in both average and distribution of data.

3.4 Media Performance for TENORM Constituents

As discussed under Water Quality Goals, Section 1.3.1, radium 226 and radium 228 are targeted for removal in the plant effluent. Typical influent levels are under the MCL of 5 pCi/L for combined radium. All the media tested were anticipated to meet this water quality goal. In addition to quantifying radium removal from the raw water, it is useful to evaluate mass transfer of radium in the plant. In other words, determining whether radium is removed during backwash or adhered to the media. To this end, radium samples were taken from the filtrate, backwash water, and the media itself at the end of the study. The results of this sampling are provided in Table 3-8 below.

Table 3-8: Filter Pilot TENORM Analyses

	Combined Radium (226 and 228) ¹		
	Filtrate ² (pCi/L)	Backwash ³ (pCi/L)	Media (pCi/g)
Anthracite / GreensandPlus	1.50 ± 0.71	10.40 ± 4.29	-- ⁴
GreensandPlus	0.88 ± 0.53	9.70 ± 7.78	9.60
Anthracite / Sand	1.28 ± 0.73	16.93 ± 18.64	8.90
Pyrolox Advantage	0.48 ± 0.04	17.27 ± 7.25	25.90

Notes:

- 1) Influent average combined radium level was 3.32 pCi/L (1.7 Radium 226 and 1.62 Radium 228)
- 2) Filtrate values are an average of 6 samples taken per column over the course of the study
- 3) Backwash values are an average of 3 samples taken per column over the course of the study
- 4) Anthracite/GreensandPlus media samples were not taken and assumed to be similar to the GreensandPlus only column and anthracite/sand column.

As shown in Table 3-8, filtrates contained very low levels of radium on average with combined levels less than 1.5 pCi/L or 70% lower than the MCL. Maximum levels across all columns were below 2.5 pCi/L. The Pyrolox Advantage column had the lowest levels of radium in the filtrate, followed by the GreensandPlus, anthracite / sand, and anthracite / GreensandPlus columns.

As anticipated, spent wash water from backwashing contained higher levels of combined radium, indicating that radium is first removed by the filter and subsequently released during backwashing across all columns. Highest levels of radium were found in the Pyrolox Advantage backwash water followed by the anthracite / sand, anthracite / GreensandPlus, and the GreensandPlus columns. It should be noted that backwash water samples were difficult to take with the filter pilot configuration and were less frequent and more variable than filtrate samples. This is evident in the higher standard deviations associated with this sampling effort.

Media analysis was performed on three of the four columns. Anthracite / GreensandPlus is presumed to be similar to the GreensandPlus and anthracite / sand columns with different configurations of the same media. Small amounts of radium were adhered to these media. Meanwhile, the Pyrolox Advantage column, contained the highest levels of radium in both the backwash and the spent media. The fact that Pyrolox Advantage had much lower filtered water radium levels indicated that it was accumulating radium on the media.

3.5 Backwash Testing

In the final phase of the project, backwash optimization was performed for all columns. Qualitatively, a reduced filter ripening period was observed for the anthracite / GreensandPlus, GreensandPlus, and Pyrolox Advantage medias when flow rates were reduced from their initial setpoints. The flow setpoints varied for each media column to achieve approximately 30% bed expansion. Other parameters tested did not result in any significant changes to media performance.

Flow setpoints at each of the four steps, including their previous setpoints for all prior weeks of the study, are shown in Table 3-9.

Table 3-9: Flow setpoints for Backwash Strategy Test – Weeks 10-12

Column / Media	Backwash Step (gpm)*		Bed Expansion ¹
	Backwash Initial	Backwash Optimized	
GreensandPlus / Anthracite	4.8	2.35 (12 gpm/sf)	31.5%
GreensandPlus	4.8	2.35 (12 gpm/sf)	30%
Anthracite / Sand	5.5	3.15 (16 gpm/sf)	30.4%
Pyrolox Advantage	4.8	2.35 (12 gpm/sf)	24%

(1) Bed Expansion was measured for the media at optimized backwash flow rates

Backwash optimization improved performance across all filter media as discussed in previous sections. Data from backwash testing will be used as a basis for the forthcoming full scale filter improvements project. Air scour is not currently used at the system and backwash flow rates will be optimized for the selected media. Additionally, this phase of the pilot study will be used to inform control strategies at the plant for automated backwashing.

3.6 Additional Analyses

Several other analyses were performed on influent, filtrate, and backwash water including inorganic analyses for metals, PFAS analyses, TOC, and Silica. Tables including data for these analyses can be found in Appendix A: PFAS results were all non-detect. Silica sampling data indicated that similar concentrations of silica were found in the influent and effluent of the columns. Based on these results, silica is not expected to accumulate on the filter media and coat over the manganese adsorption sites.

The majority of results reported for these parameters were at or near the detection limit. Thus, limited discussion is provided.

Section 4: Conclusion and Recommendations

4.1 Media Selection

This study was developed to inform media selection and filter bed operational procedures for the full-scale design of the filter bed upgrades at the CPN WTP. Media selection is recommended based on the piloted performance of the media and its ability to meet the District's water treatment and operational goals.

Of the media tested, the anthracite / GreensandPlus had the best performance in relation to District's goals. The anthracite / GreensandPlus column was the only column to meet the UFRV goal within the targeted filter loading rates 4 gpm/sf – 7.35 gpm/sf. Its turbidity performance was acceptable with an average effluent turbidity (including filter ripening periods) of 0.11 NTU. The column met CPN's iron and manganese removal goals for 95% of samples tested across all loading rates. This column also adequately removed radium to below the MCL. This media configuration will be utilized for the full-scale filter design.

Pyrolox Advantage could be considered for media selection if provided with an anthracite cap. This would improve headloss characteristics for this media. Further study is needed if this option is utilized but was not considered due to the higher cost relative to other piloted media.

Additionally, backwash testing provided useful information for development of air scour and backwash design criteria. Further testing can be completed during full scale implementation for optimization but is not required. The knowledge gained through the piloting phase will inform the basis of design and potential control strategies moving forward.

4.2 Additional Considerations

Although this media is recommended based on the metrics tested in this study, CPN and its staff should be aware of the potential radium accumulation on any media that they select. Backwash sludge will need to continue to be managed and disposed of appropriately based on the radium accumulation anticipated from the results of this study. In addition to awareness of radium accumulation, silica accumulation should also be considered. Based on the limited data collected on silica in this study, a yearly analysis of filter media should include silica measurements.

4.3 Next Steps

The Colorado Department of Health & Environment (CDPHE) requires a complete design submittal for the full-scale filter bed upgrades project. Data from the filter pilot will be used to prepare design criteria for this submittal. Sample collection and operation of the filter pilot was completed on July 1st, 2024. The pilot was subsequently disconnected and shipped back to the supplier on July 8th, 2024.

Appendix A: Tables

Table 4-1: Inorganics / TOC Analyses for Influent and Filtrate

Constituent (mg/L)	Date	Influent	Anthracite / GreensandPlus	GreensandPlus	Anthracite / Sand	Pyrolox Advantage
TOC	4/24/2024	0.5	0.5	0.5	0.5	0.5
Silica	6/19/24	6.6 ¹	5.7	-	6.4	6.6
PFAS	4/24/24	ND	ND	ND	ND	ND
	6/21/24	ND	ND	ND	ND	ND
Antimony	4/24/2024	0.0012	0.0012	0.0012	0.0012	0.0012
	5/24/2024	0.0012	0.0012	0.0012	0.0012	0.0012
	6/7/2024	ND	ND	ND	ND	ND
	6/19/2024	ND	ND	-	ND	ND
	6/21/2024	-	-	-	-	-
Arsenic	4/24/2024	0.0006	0.0006	0.0006	0.0006	0.0006
	5/24/2024	0.0006	0.0006	0.0006	0.0006	0.0006
	6/7/2024	ND	ND	ND	ND	ND
	6/19/2024	ND	ND	-	ND	ND
	6/21/2024	-	-	-	-	-
Barium	4/24/2024	0.0868	0.0773	0.0623	0.0775	0.0055
	5/24/2024	0.0899	0.0715	0.0702	0.0758	0.0465
	6/7/2024	0.1062	0.097	0.0952	0.0993	0.0713
	6/19/2024	0.1107	0.1043	-	0.1036	0.0909
	6/21/2024	-	-	-	-	-
Beryllium	4/24/2024	0.0001	0.0001	0.0001	0.0001	0.0001
	5/24/2024	0.0001	0.0001	0.0001	0.0001	0.0001
	6/7/2024	ND	ND	ND	ND	ND
	6/19/2024	ND	ND	-	ND	ND
	6/21/2024	-	-	-	-	-
Cadmium	4/24/2024	0.0001	0.0001	0.0001	0.0001	0.0001
	5/24/2024	0.0001	0.0001	0.0001	0.0001	0.0001
	6/7/2024	ND	ND	ND	ND	ND
	6/19/2024	ND	ND	-	ND	ND
	6/21/2024	-	-	-	-	-
Chromium	4/24/2024	0.0015	0.0015	0.0016	0.0015	0.0016
	5/24/2024	0.0015	0.0015	0.00015	0.0015	0.0015
	6/7/2024	ND	ND	ND	ND	ND
	6/19/2024	0.0018	0.0018	-	0.0018	0.0019
	6/21/2024	-	-	-	-	-
Nickel	4/24/2024	0.0011	0.0013	0.0012	0.001	0.001
	5/24/2024	0.0016	0.0014	0.0015	0.0014	0.0014

Constituent (mg/L)	Date	Influent	Anthracite / GreensandPlus	GreensandPlus	Anthracite / Sand	Pyrolox Advantage
	6/7/2024	0.0015	0.0013	0.0013	0.0013	0.0012
	6/19/2024	0.0015	0.0013	-	0.0013	0.0012
	6/21/2024	-	-	-	-	-
Selenium	4/24/2024	0.0008	0.0008	0.0008	0.0008	0.0008
	5/24/2024	0.0008	0.0008	0.0008	0.0008	0.0008
	6/7/2024	ND	ND	ND	ND	ND
	6/19/2024	ND	ND	-	ND	ND
	6/21/2024	-	-	-	-	-
Thallium	4/24/2024	0.0002	0.0002	0.0002	0.0002	0.0002
	5/24/2024	0.0002	0.0002	0.0002	0.0002	0.0002
	6/7/2024	ND	ND	ND	ND	ND
	6/19/2024	ND	ND	-	ND	ND
	6/21/2024	-	-	-	-	-
Mercury	4/24/2024	0.0002	0.0002	0.0002	0.0002	0.0002
	5/24/2024	0.0002	0.0002	0.0002	0.0002	0.0002
	6/7/2024	ND	ND	ND	ND	ND
	6/19/2024	ND	ND	-	ND	ND
	6/21/2024	-	-	-	-	-
Manganese	4/24/2024	0.0631	0.0008	0.0008	0.0088	0.0008
	5/24/2024	0.0805	0.0008	0.001	0.003	0.0008
	6/7/2024	0.0601	ND	ND	0.0019	0.0012
	6/19/2024	0.0614	ND		0.0009	0.0203
	6/21/2024	-	-	-	-	-
Iron	4/24/2024	0.602	0.005	0.005	0.089	0.005
	5/24/2024	1.03	0.005	0.005	0.028	0.005
	6/7/2024	0.235	ND	ND	0.006	ND
	6/19/2024	0.297	ND	-	0.005	0.024
	6/21/2024	-	-	-	-	-
Sodium	4/24/2024	19.8	22.2	22.7	22.9	21.5
	5/24/2024	18.2	21.4	20.2	21.3	20.9
	6/7/2024	20.8	21.6	25.1	25.4	24.9
	6/19/2024	21.8	25.8	-	25.6	25.2
	6/21/2024	-	-	-	-	-
Uranium	6/7/2024	ND	ND	ND	ND	0.0003
	6/19/2024	ND	ND	-	0.0008	0.0003
	6/21/2024	-	-	-	-	-

1) Average Silica in influent calculated as 6.0 across 10 samples

Table 4-2: Inorganics / TOC Analyses for Backwash Effluent

Constituent	Date	X100 BW	X200 BW	X300 BW	X400 BW
Antimony	5/24/2024	0.0012	0.0012	0.0012	0.0012
	6/7/2024	ND	ND	ND	ND
	6/21/2024	ND	-	ND	ND
Arsenic	5/24/2024	0.0006	0.0007	0.0006	0.0007
	6/7/2024	ND	ND	0.0007	ND
	6/21/2024	ND	-	0.0015	ND
Barium	5/24/2024	0.1759	1.56	0.0885	1.75
	6/7/2024	0.3016	0.16	0.1906	0.7436
	6/21/2024	0.702	-	0.283	0.4239
Beryllium	5/24/2024	0.0001	0.0006	0.0001	0.0002
	6/7/2024	ND	ND	ND	0.0001
	6/21/2024	0.0004	-	0.0002	ND
Cadmium	5/24/2024	0.0001	0.0007	0.0001	0.0001
	6/7/2024	ND	ND	ND	ND
	6/21/2024	ND	-	ND	ND
Chromium	5/24/2024	0.0015	0.0015	0.0015	0.0015
	6/7/2024	0.0031	ND	0.0109	0.0054
	6/21/2024	0.0029	-	0.0023	ND
Nickel	5/24/2024	0.0053	0.293	0.0017	0.018
	6/7/2024	0.0137	0.006	0.0335	0.0202
	6/21/2024	0.0205	-	0.0095	0.006
Selenium	5/24/2024	0.0008	0.0008	0.0008	0.0008
	6/7/2024	0.0602	0.0638	0.0561	0.0623
	6/21/2024	0.0519	-	0.0464	0.048
Thallium	5/24/2024	0.0002	0.0002	0.0002	0.0002
	6/7/2024	ND	ND	ND	ND
	6/21/2024	ND	-	ND	ND
Mercury	5/24/2024	0.0002	0.0002	0.0002	0.0002
	6/7/2024	ND	ND	ND	ND
	6/21/2024	ND	-	ND	ND
Manganese	5/24/2024	1.61	5.37	0.0821	8.37
Iron	5/24/2024	2.25	11.7	1.14	10.4
	6/7/2024				
Sodium	5/24/2024	21	21.4	20.9	22.2
	6/7/2024	22.2	22.9	22.7	22.5
	6/21/2024	23.2	-	21.8	22.6
Uranium	6/7/2024	0.0003	ND	ND	0.0003
	6/21/2024	0.0003	-	ND	ND

Appendix B: Graphs

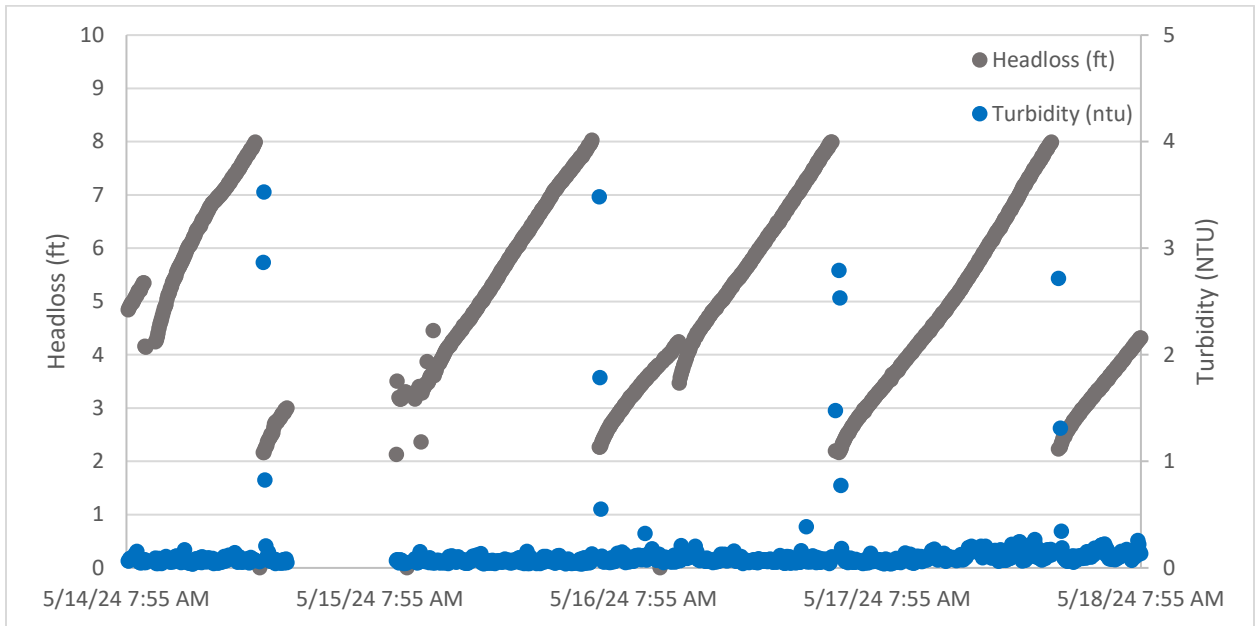


Figure 1: Anthracite / GreensandPlus Column Headloss and Turbidity Characteristics at 7.35 CPM/sf flow rate

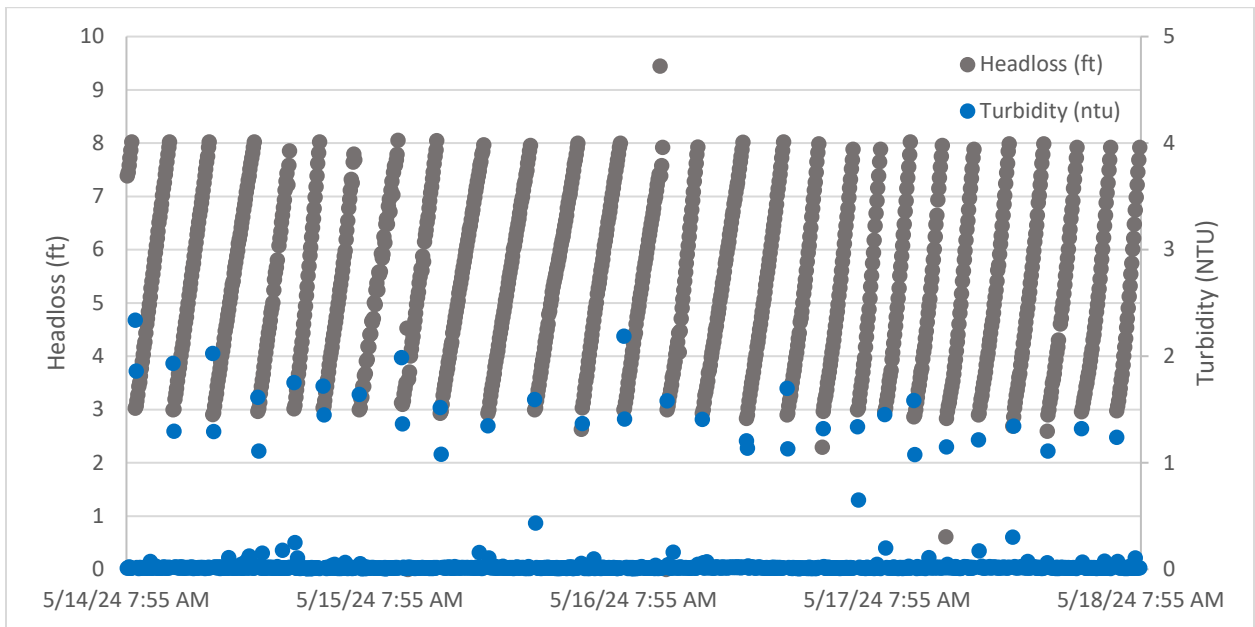


Figure 2: GreensandPlus Column Headloss and Turbidity Characteristics at 7.35 GPM/sf flow rate

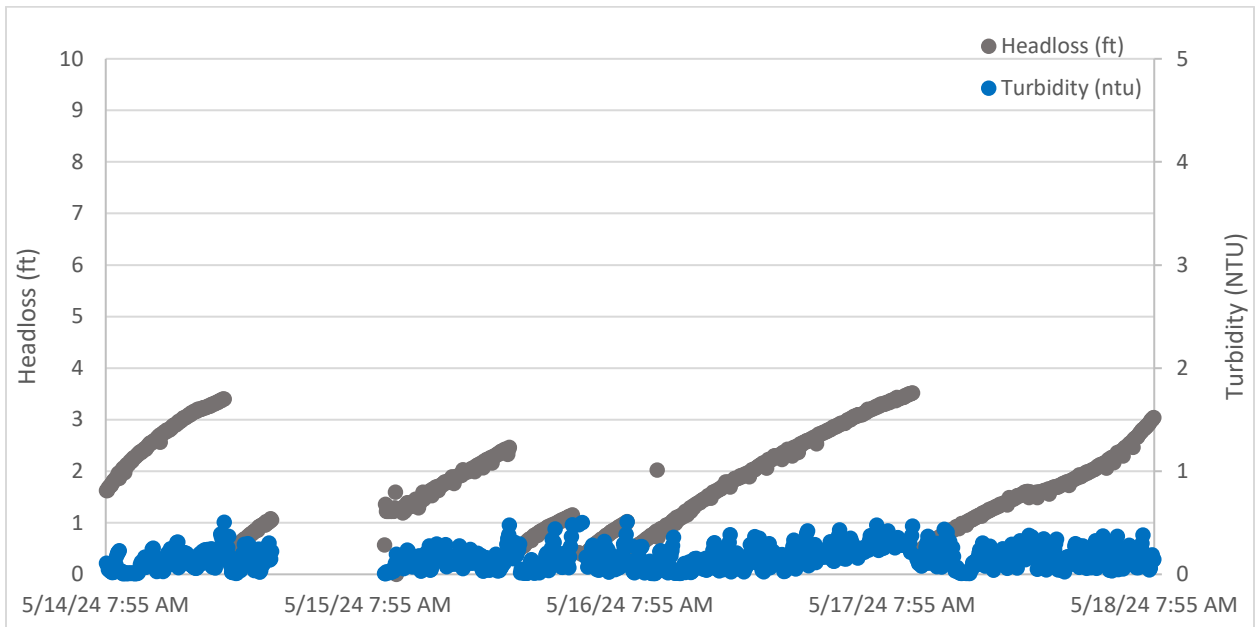


Figure 3: Anthracite / Sand Column Headloss and Turbidity Characteristics at 7.35 GPM/sf flow rate

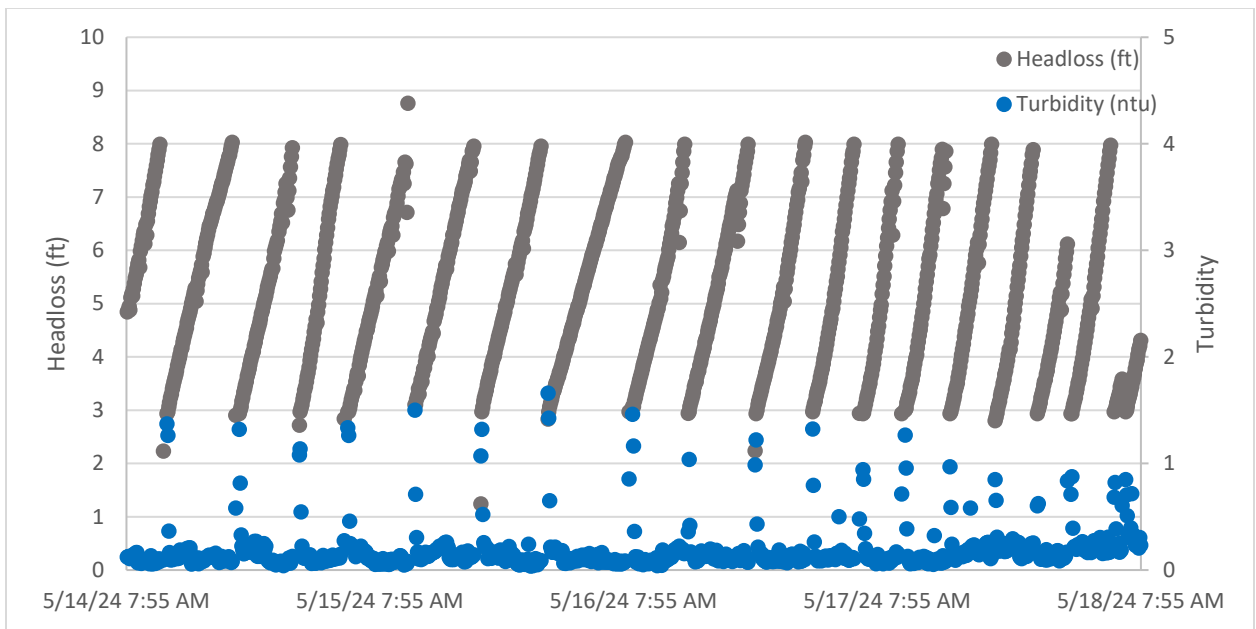


Figure 4: Pyrolox Advantage Column Headloss and Turbidity Characteristics at 7.35 GPM/sf flow rate

26 September 2024

Mr. Nathan Travis, District Manager
Castle Pines North Metropolitan District
7404 Yorkshire Drive
Castle Pines, CO 80108

Subject: Filter Beds Rehabilitation Project – Phase 1 Proposal
Castle Pines North Metropolitan District

Dear Mr. Nathan Travis:

At the Castle Pines North Water and Sanitation District (District) request, Kennedy Jenks (KJ) has prepared this engineering proposal for the design to rehabilitate and upgrade the six (6) existing media filters at the Castle Pines North Water Treatment Plant (CPN WTP). Our proposed scope of services has been developed based on record drawings, condition assessments available, and previous works performed by the Kennedy Jenks at the CPN WTP.

PROJECT UNDERSTANDING

The District operates a 5 MGD direct filtration water treatment plant that was originally constructed in 1988. Since then, the CPN WTP has undergone two expansions resulting in a facility with six (6) mixed media filters with a total nominal capacity of 5 MGD. Filters #1 and #2 are designed for a maximum capacity of 750 gpm, and Filters #3, #4, #5 and #6 are designed for a maximum capacity of 540 gpm. Sodium hypochlorite is dosed upstream of the filters to oxidize iron and manganese prior to filtration.

The existing filters consist of an underdrain system, mechanical surface agitator, influent and effluent troughs, mixed media, and a backwash system. The existing mixed media consists of different diameter gravels, garnet, sand and anthracite. To date the filters have had minor repairs to maintain operation but have not been upgraded since their original construction. In addition to rehabilitating the existing condition of the filter, the District would like to upgrade the internal filter equipment and install a media with a higher rated capacity to increase the overall WTP capacity to meet future demands. Ancillary upgrades to the filter room will also be implemented as a part of this project and is included in the list of scope items below.

As of September 2024, KJ has completed a pilot testing of various media options to identify the best future media for treatability and increasing plant capacity. Under this pilot project, KJ has been coordinating with CDPHE to coordinate on the forthcoming changes to the WTP.

While the KJ team finalizes its Pilot Analysis, KJ proposes the following scope of work summary to be completed as Phase 1 of the Filter Bed Rehabilitation Project:

- Develop CMAR Procurement Package on behalf of CPN
- Develop Draft Preliminary Design Report (CDPHE Basis of Design to be provided in subsequent phases)
- Develop Preliminary Drawings to support CMAR procurement
- CDPHE Coordination for post-pilot results review and general engagement

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Proposed Phase 1 Schedule

Kennedy Jenks proposes the following high-level schedule for this Project:

- Finalize and Submit Pilot Report to CDPHE (separate contract): October 2024
- Preliminary Design Report: October 1, 2024 – January 31, 2025
- CMAR Procurement Document Preparation: October 2024 – February 14, 2025

As the preliminary design report is progressed, KJ and the District will assess the most appropriate time to procure the CMAR Contractor. It will need to be determined if this should happen before or after the 30% design development.

The proposed work for each phase is presented below. This proposal does not include engineering services during construction. A proposal for bidding and construction phase services will be provided to the District after design is complete.

SCOPE OF SERVICES

The following phases and tasks will be required to complete the CPN Filter Beds Upgrade Project.

- Task 1 – Project Management
- Task 2 – CMAR Support Services
- Task 3 – Basis of Design
- Task 4 – CDPHE Coordination
- Task 5 – 30% Design – *scope to be provided in the future*
- Task 6 – 60% Design – *scope to be provided in the future*
- Task 7 – Final Design – *scope to be provided in the future*
- Task 7 – Project Bidding – *scope to be provided in the future*
- Task 8 – Engineering Services During Construction - *scope to be provided in the future*
- Task 9 – Develop a Standard Operations Procedure Manual – *scope to be provided in the future*
- Task 10 – Data Asset Collection – *scope to be provided in the future*
- Task 11 – Record Drawings – *scope to be provided in the future*

The proposed work under each of these phases is presented below.

Task 1 – Project Management Services

KJ will develop and implement management procedures and actions to facilitate timely and cost-effective delivery of the Project. This Task shall consist of project monitoring and administration, meetings, and project quality assurance/quality control (QA/QC) activities.

Subtask 1.1 – Project Management

Provide overall project management services, including supervision of in-house staff, planning and monitoring of contract budget and schedule, and preparing and reviewing monthly invoices and coordination with the Owner.

Deliverables:

1. Monthly Invoices (electronic, PDF format)
2. Monthly Decision Log Updates (electronic, PDF format)

Subtask 1.2 – Kick-Off Meeting

Kennedy Jenks will prepare for, attend and facilitate the project kick-off meeting. This meeting will be scheduled after receipt of a Notice-To-Proceed. At this kick-off meeting a project schedule will be provided identifying key deliverables dates and milestones, and the scope of design will be reviewed and confirmed. This meeting is budgeted to be a hybrid meeting. In person for Colorado staff and virtual for staff located outside of Colorado.

Deliverables:

1. Kick-off Meeting Agenda (PDF copies for each meeting)
2. Meeting Minutes (electronic PDF copy)

Subtask 1.3 – Quality Assurance/Quality Control

Quality assurance and quality control (QA/QC) reviews will be performed throughout the course of this project consistent with Kennedy Jenks' policies. Kennedy Jenks' QA/QC and quality management procedures establish and maintain a structure for providing reviews of all work products and adherence to industry design standards.

QA/QC activities are integrated into Kennedy Jenks' project management system from the inception of work through the delivery of final contract documents for bidding. Senior staff will perform QA/QC, but these individuals will not be directly involved in performing the project work. All deliverables will be assigned to and reviewed by a designated and qualified quality

reviewer prior to submittal to CPN.

Subtask 1.4 – As-Needed CDPHE Coordination

It is KJ's understanding that CDPHE will require follow-up discussions after receiving the pilot study final report. This proposed scope budgets for up to three (3) coordination meetings with CDPHE to review project progress and coordinate our design direction.

Subtask 1.5 – Weekly Internal Meetings

The KJ team will meet internally to confirm project status and coordinate on work to be completed. This effort is budgeted for over a 6-month period and will include the project manager, two project engineers, and discipline engineers as needed.

Subtask 1.6 - Constructability Meetings: Due to the cyclical nature that the CPN WTP is typically operated in, the construction approach will need to be discussed based on if the construction NTP occurs while the WTP is on or offline. This scope of work provides for one (1) constructability meeting. KJ will prepare for and lead a collaborative 2-hour meeting with the District to review the possible scenarios the filter rehabilitation work could occur under. The purpose of this meeting will be to discuss construction phasing expectations. This meeting will be held with the selected CMAR contractor. Budget includes time for the Project Manager and two project engineers to attend in-person, and one project member to attend virtually.

Task 2 – CMAR Support Services

The District aims to utilize a Construction Manager at Risk (CMAR) project delivery approach. KJ understands that under a CMAR project delivery, KJ would perform as the Design Engineer, to collaborate with the District and develop the design to 100% final completion. KJ also understands that the procurement process, solicitation documents, and contracting for a CMAR Contractor would be managed by the District with assistance from KJ for developing and reviewing the required documents.

KJ's services in Task 2 include development of a Request for Interest (RFI) for potential Contractors, Request for Qualifications (RFQ) for soliciting CMAR Contractor proposals for the project, CMAR Contractor procurement support and meetings, updates to the District's Division 00 and 01 specifications as needed for CMAR project delivery, collaboration with the CMAR Contractor during the design phase of the project, and review of the CMAR Contractor's development of the Guaranteed Maximum Price (GMP) for construction. Kennedy Jenks has developed a fee estimate for each of these tasks attached.

Subtask 2.1 – Development of RFI

KJ will develop an RFI document to be used by the District to advertise the upcoming project and RFQ. This procedure is a standard approach to help utilities gain interest from prospective Contractors and to support a competitive procurement process under subtask 2.3. The document developed will include high-level project information. KJ understands the District would like to hold meetings in-person with Contractor's responding to the RFI, one on one. KJ proposes to attend meetings set-up with interested

Contractors to provide technical details on the project. This budget assumes up to 4 in person site visits attended by the Project Manager (PM) and Project Engineer (PE).

Deliverables:

1. One (1) Request for Interest, pdf format
2. Site Visit Notes for up to 4 site meetings

Subtask 2.2 – Development of RFQ

KJ will develop an RFQ document soliciting proposals from CMAR Contractors to provide qualifications for the project's pre-construction services. The RFQ will be tailored for a pre-construction services contract between the CMAR Contractor and the District. Upon completion of the pre-construction services scope of work, the District will have the ability to amend the contract for construction services based upon the agreed upon GMP. This subtask is intended to include modifications to the District's standard contract language (Division 00 specifications), incorporation of the District's comments and changes into the contract documents, development of a CMAR Contractor pre-construction services scope of work, and the development of selection criteria that will be utilized to support the selection of the CMAR Contractor in subtasks 2.2 and 2.3.

Deliverables:

1. One (1) Request for Qualifications Package, pdf format
2. Updated Division 00 specifications for CMAR contract execution, Word format

Subtask 2.3 – CMAR Contractor Procurement Support: KJ will support the District with review of RFQ documents, assistance in responding to proposer questions, assistance with the proposal review process and provision of recommendations, review of schedule, and providing recommended interfaces through the design phase. The budget includes three (3) in person meetings with the District to support development of the CMAR Contractor procurement documents.

Deliverables:

1. Up to three (3) RFI responses associated with the RFQ proposal process, pdf format
2. Agendas and Meeting Notes for up to three (3) meetings, Word format
3. CMAR Contractor Recommendation for Award, pdf format

Subtask 2.4 – CMAR Contractor Procurement Meetings: KJ's Project Manager and Project Engineer will support the District with preparation for and attendance at up to three in person (3) meetings: 1) Pre-Proposal Meeting; 2) CMAR Contractor Interviews and 3) Project Kickoff Meeting with the selected CMAR Contractor. KJ will assist with answering technical questions related to the design and support the District Staff during meetings and site walks with the Contractors. KJ will attend the CMAR contract kickoff meeting. The District will lead the CMAR contract kickoff meeting which will cover reporting structures, decision authorities, design and GMP development schedule, construction schedule, and related project delivery topics.

Deliverables:

1. Agendas and Meeting Notes for up to three (3) meetings, Word format

Subtask 2.5 – Updates to Division 01 Specifications: KJ will review the District’s standard Division 01 specifications and provide recommended modifications for adaptation to a CMAR project delivery model. This will include review of the existing Division 01 specifications, recommended modifications to Division 01 specifications, and incorporation of the District’s comments and changes into the Division 01 specifications. It is intended that subtasks 2.1 through 2.5 will occur concurrently with the Preliminary Design task so that the CMAR Contractor will be under contract by the start of the 30% design task.

Deliverables:

1. Updated Division 01 specifications, Word format

Subtask 2.6 – CMAR 30% Cost Model Review Workshop: The District will provide the PDR and 30% design submittal to the selected CMAR Contractor for review and comment by the CMAR Contractor and for use as the basis for developing an initial project cost model. KJ will support the District with review of the CMAR Contractor’s cost model estimate. KJ will prepare for and attend a workshop with the District and CMAR Contractor to discuss design review comments from the CMAR Contractor; and KJ comments on the CMAR cost model cost estimate. KJ will provide responses to design review comments from the CMAR Contractor.

KJ will incorporate District approved comments/changes from the CMAR cost model milestone workshops into the 60% design phase of work to advance the design consistent with the District’s objectives and the CMAR cost model, Contractor’s means and methods of construction, and any equipment procurement and/or early-start construction work packages (if utilized). KJ will review the District approved comments/changes from the CMAR workshop with the District to determine if additional design scope or budget is required to accomplish the desired changes. Scope of work provided assumes one workshop and one round of comments for incorporation into the 30% Design.

Deliverables:

1. Comment Log for CMAR 30% cost model, Excel format
2. Agenda and Meeting Notes for 30% Cost Model Workshop, pdf format

Subtask 2.7 – CMAR 60% Cost Model Review Workshop: The District will provide the 60% design submittal to the selected CMAR Contractor for review and comment and for use as the basis for developing an updated project cost model. KJ will support the District with review of the CMAR cost model cost estimate. KJ will prepare for and attend a workshop with the District and CMAR Contractor to discuss design review comments from the CMAR Contractor; and KJ comments on the CMAR cost model cost estimate. KJ will provide responses to design review comments from the CMAR Contractor.

KJ will incorporate District approved comments/changes from the 60% CMAR cost model milestone workshops into the 90% design phase of work to advance the design consistent with the District’s objectives and CMAR cost model, Contractor’s means and methods of construction, and any equipment procurement and/or early-start construction work packages (if utilized). KJ will review the District approved comments/changes from the CMAR workshop with the District to determine if additional design scope or budget is required to accomplish the desired changes. Scope of work provided assumes one workshop and one round of comments for incorporation into the 60% Design.

Deliverables:

1. Comment Log for CMAR 60% cost model, Excel format
2. Agenda and Meeting Notes for 60% Cost Model Workshop, pdf format

Subtask 2.7 – CMAR 90% Cost Model Review Workshop: The District will provide the 90% design submittal to the selected CMAR Contractor for review and comment and for use as the basis for developing an updated project cost model. KJ will support the District with review of the CMAR cost model cost estimate. KJ will prepare for and attend a workshop with the District and CMAR Contractor to discuss design review comments from the CMAR Contractor; and KJ comments on the CMAR cost model cost estimate. KJ will provide responses to design review comments from the CMAR Contractor.

KJ will incorporate District approved comments/changes from the 90% CMAR cost model milestone workshops into the final design phase of work to advance the design consistent with the District's objectives and CMAR cost model, Contractor's means and methods of construction, and any equipment procurement and/or early-start construction work packages (if utilized). KJ will review the District approved comments/changes from the CMAR workshop with the District to determine if additional design scope or budget is required to accomplish the desired changes. Scope of work provided assumes one workshop and one round of comments for incorporation into the 90% Design.

Deliverables:

1. Comment Log for CMAR 90% cost model, Excel format
2. Agenda and Meeting Notes for 90% Cost Model Workshop, pdf format

Subtask 2.8 – CMAR GMP Review Workshop: The District will provide the final design submittal to the selected CMAR Contractor to use in developing its guaranteed maximum price (GMP) and construction schedule for the Project. KJ will support the District with review of the CMAR Contractor's GMP and construction schedule. KJ will prepare for and attend a workshop with the District and CMAR Contractor, as needed, to discuss the GMP and construction schedule.

Deliverables:

1. Comment Log for CMAR GMP, Excel format
2. Agenda and Meeting Notes for GMP Workshop, pdf format

Task 3 – Preliminary Design

The Preliminary Design phase will develop and confirm treatment process elements, establish existing utility locations and available capacity, prepare conceptual layouts for the location of new equipment, and develop conceptual construction sequencing approaches. The Preliminary Design phase includes site investigations, progress meetings and preparation of the Preliminary Design Report (PDR).

Based on previous work completed with the District, Kennedy Jenks understands that the following design elements are to be incorporated into the design of the Filter Beds Rehabilitation Project (Project):

1. Identification of a new media that will provide adequate treatment and increase the flow rate capacity of each filter bed, based on the recent filter pilot study completed.
2. Confirm overall plant infrastructure ability to handle 7mgd peak capacity.
3. Identification of demolition work to be completed.
4. Replacement of the existing underdrain system with a new underdrain system that supports the new selected media.
5. Replacement of the existing mechanical surface agitator with an air scour system to increase backwash efficiency.
6. Replacement of air delivery system.
7. Replacement of the influent and effluent troughs. New troughs are to have covers to minimize media in the backwash system.
8. Repair of concrete inside each filter as needed.
9. Replacement of grated lower floor access with diamond plated access plates.
10. Installation of corrugated roofing where former skylights were located.
11. Installation of new protective coating on the upper-level plant floor, including in the filter room.
12. Installation of a permanent bubble diffuser system in the raw water mix tank.
13. Identification of corrosion improvements and structural improvements needed.
14. Identification of redundancy improvements (e.g. redundant chlorine dose point for finished water).

Task 3.1 Preliminary Design Criteria Development

Subtask 3.1a: Develop Preliminary Design Criteria:

The District and KJ completed a filter pilot study in August of 2024. With the media selection finalized under the pilot phase, KJ will use the raw water quality data, pilot testing data, and media selected to establish baseline design criteria for the overall WTP.

KJ will work with the District to confirm and define the specific design parameters and system redundancy needs for the Project to meet CDPHE Reg 11 standards and the District's treated water goals. KJ will also assess the hydraulic capacity of the existing plant infrastructure to handle 7mgd of flow, the Districts desired peak capacity.

KJ will prepare a preliminary design criteria table for discussion and review. The detailed design criteria table will also be refined and presented in the 30/60/90/final design drawings and specifications.

Subtask 3.1b: Develop Preliminary Process Flow Diagram & Hydraulic Profile:

KJ will prepare a preliminary process flow diagram (PFD) for the WTP to capture process flows for the: raw water mix tank, 6 filter beds, backwash system, future air scour system, clearwell, and distribution storage. This effort will be an update to the existing PFD developed for previous capital projects.

KJ will also prepare a preliminary project hydraulic profile for the whole water treatment plant process. This will be done with the support of hydraulic software like Visual Hydraulics. KJ will use the hydraulic model to develop a Hydraulic Profile Drawing Sheet that will be included in the PDR. It is

anticipated that this effort will require field time to confirm facility elevations inside the WTP. KJ has budget for 2 site visits by two (2) staff members for field measurement purposes.

Subtask 3.1c: Develop Preliminary SCADA Design & Controls Descriptions

KJ has developed preliminary P&IDs for the WTP under the Facility Documentation Program. KJ will use these to update for the BDR as needed under Task 3.3. Under this task, KJ will develop the SCADA block diagram (1 sheet). The SCADA block diagram will also be refined and presented in the 30/60/90/final design drawings and specifications

KJ and the District will hold one field meeting to discuss current plant operations and controls strategies. KJ will confirm existing operational controls and how the District would like to automate and optimize plant controls as it pertains to the filter bed operations. Information from this meeting will be used to develop preliminary controls descriptions that will then be used to develop the filter beds control strategies during the Project design. KJ assumes that control strategies developed for other plant processes are not being modified under this scope of work.

Task 3.1 Deliverables

1. Preliminary Design Criteria Table
2. Preliminary WTP Process Flow Diagram
3. Preliminary WTP Hydraulic Profile
4. Preliminary SCADA Block Diagram
5. Preliminary P&IDs
6. Preliminary Controls Descriptions

Task 3.1 Deliverables will be provided as appendices to the PDR.

Task 3.2 Preliminary Design Development

Subtask 3.2a Development of Equipment and Instrumentation List

KJ will develop and coordinate an instrumentation and equipment list for the Project with the District and Semocor operations staff. During this task KJ will prepare a preliminary equipment list for the Project that will be used in design criteria development, the power load analysis, and development for the electrical design. This list will be captured in the overall PDR and will be used to further define the specifications to be developed for the overall project.

KJ has assumed 1 virtual meeting for 1 hour, to review and confirm the Project equipment and instrumentation list. The agreed upon equipment and instrumentation list will be included in the PDR.

Subtask 3.2b Load Analysis Study

Based on the Equipment and Instrumentation List developed under subtask 3.2a, KJ will evaluate the existing MCC to confirm there is enough load capacity available for new equipment. This power load analysis will evaluate the existing electrical infrastructure and develop design criteria for planned process modifications. KJ will request existing utility data and/or historical client electronic metering

data as a means to establish the existing load at the site in compliance with NEC Article 220.87. It is assumed that this data will be readily available upon request.

The load analysis information will be provided as a section within the PDR after all data has been collected, analyzed and operational feedback is provided by plant staff. KJ will use the data collected to document the existing WTP electrical load data and the ability to add additional load as part of the Project.

KJ will provide an initial estimate of the new loads, and the loads that will be eliminated, as part of the Project, and how those loads would be incorporated into the existing electrical system and standby generator system. If it is determined that additional power supply equipment is needed during this task, the PDR will include sections discussing locations available to install this equipment that meet building code requirements for said equipment.

Subtask 3.2c Underdrain Equipment Assessment

There are three (3) typical types of underdrains that have been installed in conventional filters historically, like the ones at the CPN WTP. These include block laterals, stainless steel, or monolithic floors with nozzles. The underdrain system of a filter is a critical component that contributed to overall filter performance and capacity. The current system is from the original construction of the filter beds and is assumed to be at the end of its useful life, and will be upgraded as a part of this project.

The existing system was also designed around a mixed media with larger diameter gravel resting on the underdrain system. Based on the filter pilot project it is anticipated that the new future media will be comprised of finer media like greensand. For this phase of the Project, KJ will investigate up to two types of low profile stainless steel underdrain systems that could be installed. One will be a system that will replace the existing system in its entirety, and the other will be the AWI underdrain system that can be installed on top of some older underdrain systems, like Leopold clay underdrains.

It is KJ's understanding that a scope item in the CMAR contract will be to support potholing each filter with a block out box to:

- 1) Confirm type and condition of existing underdrain system.
- 2) Assess the concrete condition for future underdrain anchoring.
- 3) Obtain accurate as-built information on filters size, elevations etc.

For task 3.2c, KJ will assess the two (2) identified underdrains to gather information on:

- 1) Ability to be installed in existing filters based on the CPN filter's layout
- 2) Manufacturer information on installation, product maintenance, estimated lifespan and cost
- 3) Ability to support the selected media
- 4) Ability to support project plant capacity and treatment objectives.

This task will be documented in the PDR. Effort includes time for one site visit for measurement purposes, if needed.

Subtask 3.2d Air Scour and Blower System Evaluation

CPN desires to replace the existing surface wash system with a new air scour system. The CPN WTP has a decommissioned blower system that originally supplied air to the raw water mix tank. Some of the original piping was demolished during the Tank Rehab Project.

KJ assumes that the current set of blowers are not serviceable and/or are not compatible with the current design. Under this task, KJ will evaluate:

- 1) The blower capacity needed to supply air scour to the upgraded filters.
- 2) Feasibility of fitting blowers of this capacity in the exiting blower room (meeting building code requirements)
- 3) Feasibility and preliminary routing of potential future air scour piping.
- 4) Up to two (2) types of blowers to be considered for installation.

In addition, CPN would like to explore the feasibility of installing a permanent tank mixer in the raw water mix tank as a part of this Project. Since the blower system will be repurposed for air scour, it was determined with the District that an in-tank mixer would be best to enhance oxidation.

KJ will assess up to two (2) types of in tank mixers and their feasibility for installation. This task will be documented in the PDR.

Subtask 3.2e Process Improvement Evaluations

Filter to Waste

The current filter beds do not have a filter to waste capability. Having this process capability would allow more operational flexibility during filter or well start-up. KJ has budgeted 24 hours to assess the feasibility of installing filter waste capability at the plant.

Raw Water Monitoring

Operational challenges can occur at the CPN WTP when a groundwater well is started up. This can cause a slug of iron to come through the raw water pipeline. It would be beneficial to have raw water monitoring to alert operations when the raw water entering the WTP is of poorer WQ than usual. In addition, the WTP operations would benefit from a more accessible raw water sampling point. KJ will investigate the feasibility to rehabilitate the raw water intake piping to include a raw water quality monitoring station. This could be achieved via a below grade vault or above grade piping. KJ has budgeted 24 hours to assess the feasibility installing a raw water monitoring.

Subtask 3.2f Corrosion and Structural Evaluations

Kennedy Jenks will develop a list of corrosion and structural related improvements that are recommended to be incorporated into the 30% design. The KJ project engineer and structural engineer will develop the list in the field (one site visit) and verify this list with the District. The agreed upon areas of scope will be included in the Project design. This can include items like: corroded pipe repair, sealing floors, adding door thresholds, concrete crack and surface repair etc.

Task 3.2 Deliverables

- Electrical Load Analysis PDR Section
- Underdrain Systems Evaluation PDR Section
- New Blower System Feasibility PDR Section
- Filter to Waste Feasibility PDR Section
- Raw Water Monitoring Feasibility PDR Section
- Corrosion and Structural Evaluation PDR Section

Task 3.3 Preliminary Design Report

Subtask 3.3a Preliminary Design Report

After completion of tasks 3.1 and 3.2, Kennedy Jenks will develop the Preliminary Design Report (PDR) for the project. This TM will be a guiding document that sets the direction of the design project but does not include the effort for submitting the Basis of Design Report Submittal that is required by CDPHE (this submittal will be completed in a separate phase). It is KJ's understanding, the District will procure the CMAR Contractor and utilize the PDR to procure this contract. This will support the field investigation efforts needed to start the Project design based on existing conditions that are more known.

The PDR will contain the following information:

- Current CDPHE Reg 11 requirements that the CPN WTP must adhere to.
- The Design Criteria Developed for the Project
- Updated Process Flow Diagram
- New WTP Hydraulic Profile
- Preliminary Controls Description
- Preliminary SCADA Block Diagram
- Preliminary P&D Drawings
- Equipment and Instrumentation List
- Electrical Load Analysis Summary
- Underdrain Systems Evaluation Summary
- New Blower System Feasibility Summary
- Filter to Waste Feasibility Summary
- Raw Water Monitoring Feasibility Summary
- Filter Pilot Report (as an Appendix)

Subtask 3.3b Preliminary Design P&IDs

Under the Facility Documentation Program, preliminary P&IDs for the WTP have been developed. To support the design development and CMAR process, KJ will update the existing P&IDs and add the lower mechanical portion of the P&IDs for:

- Typical Filter Bed Configuration (1 sheet)

- Air Scour System (1 sheet)
- 1 additional sheet as needed

Subtask 3.3c Preliminary Design OPCC

KJ will prepare an engineer's opinion of probable construction cost (OPCC) for the project based on the PDR design. The OPCC will include a breakdown to show the estimated cost for the major components by construction division. The OPCC will be developed at a Class 4 level based on standards set forth by the Association for the Advancement of Cost Estimating (AACE).

Subtask 3.3d Preliminary Design Review Meeting

Kennedy Jenks will organize and lead a preliminary design review meeting. This goal of this meeting will be to review KJ's findings in the preliminary design phase and confirm our team's direction for the project design. Based on comments received during this workshop, Kennedy Jenks will finalize the Preliminary Design Report. KJ will prepare and distribute a meeting agenda and meeting minutes. Scope for this task includes budget for a 2 hour meeting and for the Project Manager, and Project Design Staff to attend in person.

Task 3.3 Deliverables

1. Preliminary Design Report (PDF, Draft and Final)
2. Preliminary Design Review Meeting Presentation
3. Preliminary Design Review Meeting Notes with Decision Log Updated
4. Preliminary Design OPCC
5. Preliminary Design P&ID Drawings (PDF)

SERVICES NOT INCLUDED

The following services are not included in this agreement. The need for these services will be identified during the preliminary design phase and the scope and budget will be amended as necessary.

1. Design Survey
2. Geotechnical Investigation and Report
3. Full structural evaluation of concrete walls
4. Permit Fee Review
5. Landscape Design
6. Site Improvement Plan Approval (L&E Planning Process)
7. Stormwater Design and Report
8. Studies – Including, but not limited to, environmental, acoustic, radio path, and wildlife.

Mr. Nathan Travis
Castle Pines North Metropolitan District
25 September 2024
Page 14

COMPENSATION

Compensation for our services will be on a time and materials reimbursement basis in accordance with our 2024 Billing Rates, attached. The initial fee budgets indicated below are based on our current level of understanding of the project and the assumptions made in the scope of services. Payments shall be made monthly based on invoices which describe services and list actual costs and expenses.

We propose a budget for each phase as follows:

<i>Task</i>	<i>Budget</i>
Task 1 - Project Management	\$50,538
Task 2 – CMAR Support Services	\$92,162
Task 3 – Preliminary Design	\$182,018
Total	\$337,447

Attached are the Standard Conditions that apply to this Agreement . If this is acceptable, please sign below and return a copy to me.

Sincerely,
Kennedy/Jenks Consultants, Inc.



Greg S. Sekera, P.E.
Principal

ACCEPTED BY:
Castle Pines North Metropolitan District

Nathan Travis, District Manager

Date




Alex Page, P.E.
Project Manager

Encl: Fee Estimate
KJ Standard Conditions

Proposal Fee Estimate

CLIENT Name: Castle Pines North
 PROJECT Description: Filter Re|Filter Re|Filter Re|Filter Rehab Project
 Proposal/Job Number: 24460676 Date: 9/26/2024

January 1, 2016 Rates	Cavaluzzi (E9)	Jon W. (E8)	Greg S. (E8)	Brad F. (E8)	Todd R. (E8)	Mike W. (E6)	Kieran C (E6, Estimator)	Julia L. (E6)	Connor R. (E5)	Zach P. (E5)	Alex P. (E5)	Ben S. (E4)	Erica W. (E3)	Ty B. (E3)	Maren P. (E2)	CAD	Project Administrator	Admin. Assist.	Total	KJ Labor	KJ ODCs	Total Labor	Total Subs	Total Expenses	Total Labor + Subs + Expenses	
Classification:	\$272	\$250	\$250	\$250	\$250	\$230	\$230	\$230	\$205	\$205	\$205	\$165	\$148	\$165	\$131	\$140	\$99	\$92	Hours	Fees	Fees				Fees	
Project Communications Charges	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$12,729	\$12,729
Task 1 - Project Management																										
1.1 - Project Management								40			24								16	80	\$15,704	\$200	\$15,704	\$0	\$220	\$15,924
1.2 - Kick-off Meeting								4				4	4			4			16	\$2,696	\$200	\$2,696	\$0	\$220	\$2,916	
1.3 - QA/QC				12	40														40	\$10,000		\$10,000	\$0	\$0	\$10,000	
1.4 - As-Needed CDPHE Coordination																			0	\$0		\$0	\$0	\$0	\$0	
1.5 - Weekly Internal Meetings								16			12	16	16			16			76	\$13,244		\$13,244	\$0	\$0	\$13,244	
1.6 - Constructability Meetings								8			4	8	12			8			40	\$6,804	\$1,500	\$6,804	\$0	\$1,650	\$8,454	
Task 1 - Subtotal	0	0	12	0	40	0	0	68	0	0	40	28	32	0	28	0	16	0	252	\$48,448	\$1,900	\$48,448	\$0	\$2,090	\$50,538	
Task 2 - CMAR Support Services																										
2.1-Development of RFI	4	4	4								8	32					4		44	\$7,316	\$200	\$7,316	\$0	\$220	\$7,536	
2.2- Development of RFQ	8	4	4	12				4			16	40	32				4		108	\$18,932		\$18,932	\$0	\$0	\$18,932	
2.3- CMAR Contractor Procurement Support		8	8	8				4			16	16							44	\$8,840	\$200	\$8,840	\$0	\$220	\$9,060	
2.4- CMAR Contractor Procurement Meetings				12				4			24	32	16						76	\$13,488	\$1,500	\$13,488	\$0	\$1,650	\$15,138	
2.5- Updates to Div 01 Specs			4		4						12	24					4		44	\$7,816		\$7,816	\$0	\$0	\$7,816	
2.6 - CMAR 30% Cost Model Review Workshop				12			8	4			8	16							36	\$7,040		\$7,040	\$0	\$0	\$7,040	
2.7 - CMAR 60% Cost Model Review Workshop				12			16	4			8	16							44	\$8,880		\$8,880	\$0	\$0	\$8,880	
2.8 - CMAR 90% Cost Model Review Workshop				12			16	4			8	16							44	\$8,880		\$8,880	\$0	\$0	\$8,880	
2.9 - CMAR GMP Review Workshop				12			16	4			8	16							44	\$8,880		\$8,880	\$0	\$0	\$8,880	
Task 2 - Subtotal	12	16	80	20	4	0	56	28	0	0	108	208	48	0	0	0	12	0	484	\$90,072	\$1,900	\$90,072	\$0	\$2,090	\$92,162	
Task 3 - Preliminary Design																										
Task 3.1 - Preliminary Design Criteria Development																										
3.1a - Preliminary Design Criteria					2			4			4	20	40			24			94	\$14,604		\$14,604	\$0	\$0	\$14,604	
3.1b - Preliminary PFD & HGL					2			4	16			32	16			32	32		134	\$21,020	\$150	\$21,020	\$0	\$165	\$21,185	
3.1c - Preliminary SCADA Design & Controls Description								4			4	16	32	24		16	16		112	\$17,412	\$150	\$17,412	\$0	\$165	\$17,577	
Task 3.2 - Preliminary Design Development																										
3.2a - Equip & Instrumentaiton List											4	8	12	8		8			40	\$6,284		\$6,284	\$0	\$0	\$6,284	
3.2b - Load Analysis Study									8	8		4		40					60	\$10,540		\$10,540	\$0	\$0	\$10,540	
3.2c - Underdrain Equipment Assessment					2						4	8	24			24			62	\$9,336	\$150	\$9,336	\$0	\$165	\$9,501	
3.2d - Air Scour and Blower System Eval					2				8	8		12	32	16		24			102	\$16,280		\$16,280	\$0	\$0	\$16,280	
3.2e - Process Improvement Evaluations					4			4			8	24	24			16			80	\$13,168		\$13,168	\$0	\$0	\$13,168	
3.2f - Corrosion and Structural Evaluation							20				4	16				12			52	\$9,632	\$150	\$9,632	\$0	\$165	\$9,797	
Task 3.3 Preliminary Design Report																										
3.3a - Preliminary Design Report							8				12	24	32	12	32	4	4		128	\$20,124		\$20,124	\$0	\$0	\$20,124	
3.3b - Preliminary Design P&IDs											8	8	16	8		56			96	\$14,488		\$14,488	\$0	\$0	\$14,488	
3.3c - Preliminary Design OPCC								32			8	24	8			8			80	\$15,192		\$15,192	\$0	\$0	\$15,192	
3.3d - Preliminary Design Review Meeting							4	12	4	4	8	8	12			12			64	\$11,628	\$1,500	\$11,628	\$0	\$1,650	\$13,278	
Task 3 - Subtotal	0	0	0	0	12	32	32	28	36	20	64	204	248	108	208	108	4	0	1104	\$179,708	\$2,100	\$179,708	\$0	\$2,310	\$182,018	
All Phases Total	12	16	92	20	56	32	88	124	36	20	212	440	328	108	236	108	32	0	1840	\$318,228	\$5,900	\$318,228	\$0	\$19,219	\$337,447	



09/15/24 - 10/15/24

COMMUNICATIONS REPORT

Table of Contents

- Marketing Metrics
- Emergency Test Notification
- East Plum Creek Project Program
- Water Source Change
- Water Main Break Communication
- 2025 Budget Communication
- Daupler Public Emergency Data
- Water Bill Education
- November Connection Ad
- October Billing Insert
- Graphics/Videos shared

Marketing Metrics

WEBSITE ENGAGEMENT (09/15 - 10/15)

- Website Visits
 - 61,882
 - Specific Page Visits
 - 2024 Water Quality Report: 650 Page Views | 09/15 - 10/15
 - Board Meeting Schedule: 483 Page Views | 09/15 - 10/15
 - Finances Page: 1376 Page Views | 09/15 - 10/15

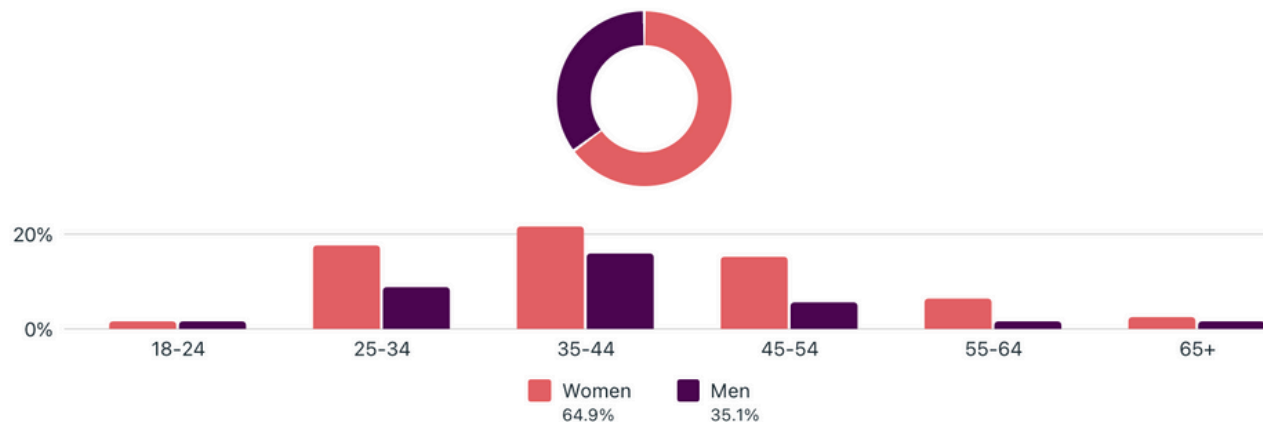
EMAIL COMMUNICATION

- **5 EMAILS SENT**
 - 65.2% Average Open Rate
 - 6% Average Link Click Rate

META SOCIAL MEDIA ENGAGEMENT (FACEBOOK AND INSTAGRAM)

- Total Impressions:
 - 55,424
- Total Profile Views
 - 412
- Total Website Clicks
 - 2,067
- New Follows
 - Instagram: +5 (146 total)
 - Facebook: +4 (44 total)

Age & gender ⓘ



Emergency Test Notification

SUMMARY:

On Wednesday, September 25th, at 12:00 PM MT, we conducted an Emergency Notification Test using the Daupler Emergency Notification system. This test involved sending text messages to cell phones and phone calls to landlines to 2958 contacts to ensure that our emergency communication system is functional and ready to notify residents promptly in the event of a CPNMD emergency.

Residents were informed that no response was required. The test concluded with mostly no resident feedback reported, which confirmed that the system was operational and the communication channels were successfully utilized. Five residents did unsubscribe from the notifications.

COMMUNICATION TO RESIDENTS:

Reminder notifications were sent out through the following channels:

- Email campaigns to subscribers.
- Website banner and front-page updates.
- Social media posts on all relevant platforms.
- These reminders were intended to prepare residents for the test and avoid any confusion during the notification process.

Test Day Communication:

- Daupler alerts included:
 - Text messages sent directly to cell phones.
 - Phone calls placed to registered landlines.

CONCLUDING ACTIONS:

Continued Use of Daupler:

- Daupler will remain the primary tool for emergency water notifications and other critical updates to residents.
- The system performed as expected with no reported errors or issues.

East Plum Creek Project Program Update

SUMMARY:

This project targets a segment of Plum Creek in Douglas County, focusing on various environmental improvements, including:

- Trash removal
- Streambank stabilization
- Enhancements to overall river health

COMMUNICATION TO RESIDENTS:

- Social Media:
 - Posts on platforms to raise awareness and engage with residents about the importance of the project.
 - We plan to do visuals and status updates to showcase progress and encourage community interest.
- Website Updates:
 - A dedicated section on the website highlighting the project's objectives in this video, future timeline, and community benefits.

NEXT STEPS:

Share key milestones on social media and the website to keep residents informed and engaged.

Water Source Change

SUMMARY:

The purpose of the communication is to inform residents about the origin and treatment of their water, ensure transparency, and maintain trust in the utility's efforts to manage sustainable water sources. From October 1st to the end of April, the Castle Pines North Metro District utilizes renewable and reusable water rights to ensure efficient and environmentally responsible water management.

Key water sources include:

- Hock Hocking Mine: A renewable water source stored in Chatfield Reservoir.
- Treated Wastewater Effluent from Plum Creek Water Reclamation Authority: Stored in the same reservoir, with a 1,000-acre-foot capacity.
- Partnership with Centennial Water and Sanitation District: Water is treated and stored in a 4-million-gallon tank and distributed to residents.

COMMUNICATION TO RESIDENTS:

- Video and Diagram
 - Email newsletters and district website updates
 - Social media posts and alerts
 - Connection Ad
 - Billing Insert

NEXT STEPS:

Regular updates, including provide ongoing information throughout the transition period to keep residents informed. This includes updating residents on water characteristics they might notice from the two different water sources and educating residents on the sources.

Water Main Break Communication

SUMMARY:

On Thursday, September 26th, 2024, a water main break occurred east of Yorkshire Drive, affecting Clare Court and Brixham Court. The affected residents experienced a temporary water service disruption, with an estimated restoration time of 6-8 hours. The Castle Pines Metropolitan District (CPNMD) issued a service notice promptly through multiple communication channels to ensure all affected residents were informed.

COMMUNICATION TO RESIDENTS:

Communication Channels Utilized

- Social Media:
 - Shared updates via social media pages.
 - Provided a concise description of the situation, map of affected areas, estimated restoration time, and a contact number for inquiries.
- Daupler Notification System:
 - Sent push notifications and alerts directly to registered residents via the Daupler emergency notification system to ensure timely awareness.
- Email Notification:
 - An email was distributed to residents, detailing the water main break, expected service downtime, and contact information for further questions.
- Website Front Page and Emergency Banner:
 - The CPNMD website displayed the service disruption notice prominently on the homepage with an emergency banner for easy access to information.
 - Included a map and details of affected residences.

NEXT STEPS:

Review Daupler notification performance to identify opportunities for improving alert timeliness and reach.

2025 Budget Communication

SUMMARY:

We are holding a series of meetings to review and discuss the 2025 budget, open to the public for observation and engagement.

Meeting Schedule

- Wednesday, October 23rd @ 5:30 PM
 - Special Meeting – Budget Work Session
- Monday, November 25th @ 6:00 PM
 - Public Hearing of 2025 Budget
- Wednesday, December 11th @ 6:00 PM
 - Adoption of 2025 Budget

COMMUNICATION TO RESIDENTS:

This schedule and budget process were shared via:

- Email
- Website banner & calendar update
- Social media
- Connection Ad
- Billing Insert


NEXT STEPS:

We will communicate with residents updates to the 2025 budget process and approval.

Daupler Public Notification Data

SUMMARY:

Below is an outline of the Daupler Notifications sent out throughout the past 30 days to address resident inquiries:



8 Recipients

En Sp


We are doing testing to get ready for making the connections to the new water line as part of the Monarch reconstruction project.

Created by: **N** Nathan Travis

0 replies

Sent at 10/21/24 5:55 PM

[View](#) [⋮](#)



8 Recipients

En Sp


water service may be briefly interrupted tomorrow 10/22 beginning at 9:00 am. We anticipate any disruption will last less than 30mins. -CPNMD 303.688.8550

Created by: **N** Nathan Travis

0 replies

Sent at 10/21/24 5:52 PM

[View](#) [⋮](#)



66 Recipients

En Sp


Water service is being restored. You may experience temporary discolored water or air in your lines. Questions? 303-688-8550, option 9. - CPNMD

Created by: **N** Nathan Travis

0 replies

Sent at 9/27/24 4:58 PM

[View](#) [⋮](#)



66 Recipients

En Sp


Water service has been suspended due to ongoing work on an emergency valve repair. At this time, we do not know when service will be restored- CPNMD

Created by: **N** Nathan Travis

0 replies

Sent at 9/27/24 2:36 PM

[View](#) [⋮](#)



28 Recipients

En Sp

Water service will be shut off for approximately 8 hours beginning at 8:30 am 9/27/24 for an emergency valve replacement. Questions? Call 303-688-8550 - CPNMD

Created by: **N** Nathan Travis

0 replies

Sent at 9/26/24 8:05 PM

[View](#) [⋮](#)



14 Recipients

En Sp

Due to a water main break water has been shut off to your home. We anticipate service will be restored in the next 6-8 hours. Questions: 303-688-8550

Created by: **N** Nathan Travis

0 replies

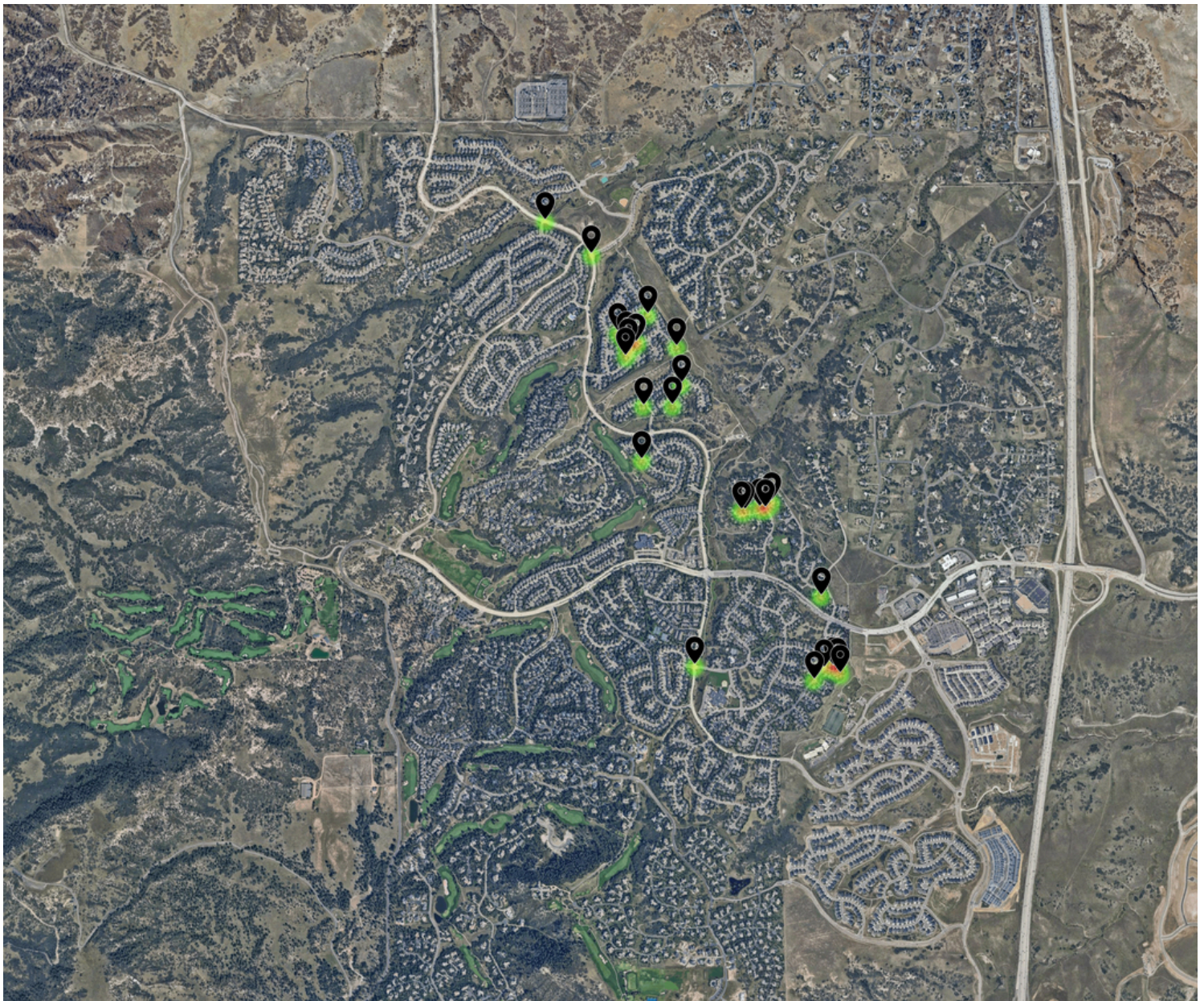
Sent at 9/26/24 8:49 AM

[View](#) [⋮](#)

Daupler Public Notification Data

SUMMARY:

Below is a heat map of all residents submitting an inquiry within the past 30 days. The above notifications correspond to the residents affected.



Water Bill Education

SUMMARY:

With upcoming changes to water billing in 2025, it is essential that residents understand the breakdown of their water bills. Transparent communication about line items ensures residents are aware of what each charge represents and how it contributes to the overall water system's operations, maintenance, and infrastructure improvements. This report provides an overview of the messaging strategy for effective communication, the content of these communications, and concluding actions to prepare for the transition.

COMMUNICATION TO RESIDENTS:

- There are five key categories on residents' monthly water bills:
- Why are these line items important?
- Residents with questions are encouraged to use the online contact form on the CPNMD website: <https://www.cpnmd.org/billing-and-account-questions-contact-form>.
- Communication Channels
 - Email Campaign: Detailed breakdowns to all residents, explaining line items and how they affect water services.
 - Website Update: Dedicated FAQ page on the CPNMD website for easy access to billing information.
 - Social Media Campaign: Provide line item breakdown and explanation for each category across social channels.

NEXT STEPS:

Monitor Feedback and Engagement

- Track inquiries through the online form and social media channels to address concerns promptly.
- Collect feedback after the first few months of 2025 to assess if further communication or clarification is needed.

November Connection Ad

As we move through the final months of 2024, we are finalizing our budget, planning projects, and are excited for a strong 2025.

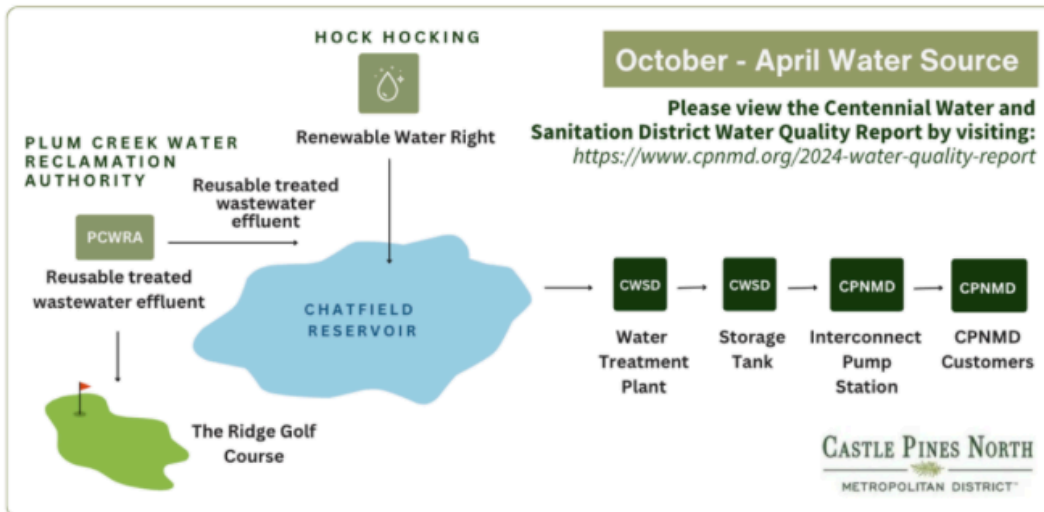
UPCOMING BUDGET MEETINGS

We are conducting a series of meetings to review and discuss the 2025 budget, which will be open to the public for observation and engagement. The draft budget has been sent to our Board Members and is available online.

Monday, November 25th @ 6:00pm	Public Hearing of 2025 Budget
Wednesday, December 11th @ 6:00pm	Adopt 2025 Budget

Additionally, with the changing seasons, we have implemented updates to our water supply plan for the fall and winter months.

We are doing things a little differently this year! In most years, our water in the fall and winter months is sent to us from Centennial Water and Sanitation District (CWSD). They treat our renewable water stored in Chatfield Reservoir and send it our way using a pipeline that connects our districts. This year, CWSD is doing some renovations to their water treatment plant, and next year we plan to do the same at our own plant! To help with this, this year, we will be taking less water for a shorter period of time and taking more water earlier than normal next year. This lets both of our districts confidently take our plants offline to have some major upgrades in place.

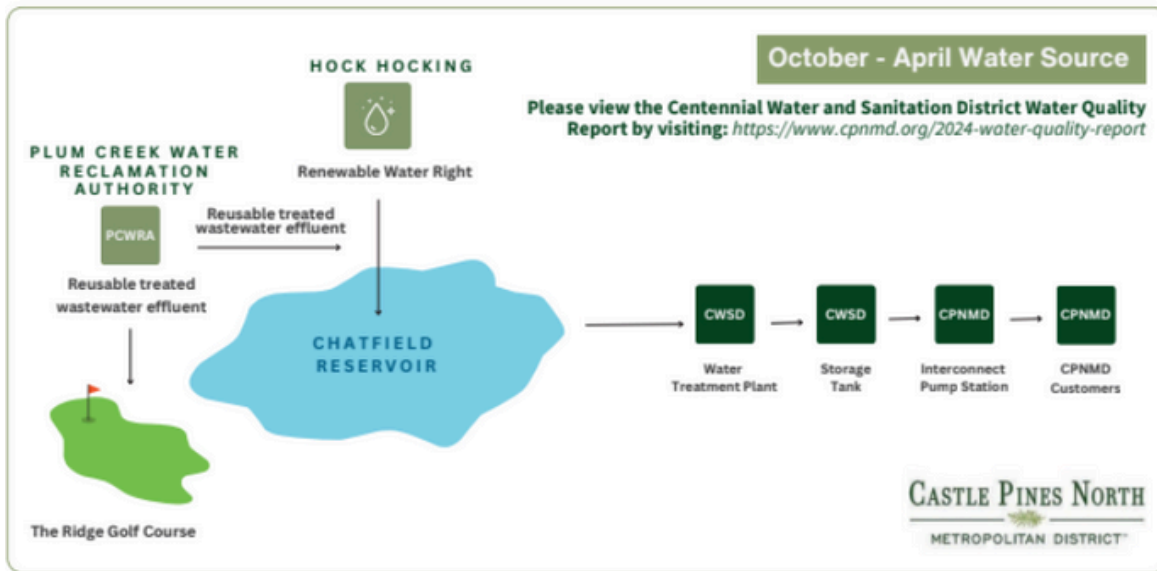


October Billing Insert



SEASONAL WATER SOURCE CHANGE

We are doing things a little differently this year! We typically utilize our CWSD renewable water resources from October 1st through April 30th of each year. Our neighbors to the north, Centennial Water & Sanitation District, treat our renewable water, which we then pump through our interconnect pump station and pipeline into our water distribution system. However, this year, to facilitate a major CWSD Treatment plant upgrade and our own Filter Replacement Project set to begin in Fall of 2025, we will be deferring deliveries. We will only take deliveries from CWSD for a few weeks during October, before shutting down the Interconnect for the bulk of the fall and winter months. Next year, we plan to begin to take deliveries earlier than normal to allow for a prolonged shut down of our Water Treatment Plant, allowing us more time to complete our Filter Replacement Project.



UPCOMING BUDGET MEETINGS

We are conducting a series of meetings to review and discuss the 2025 budget, which will be open to the public for observation and engagement. The draft budget will be sent to Board Members and available online beginning October 15th. **Dates may be subject to change.

Wednesday, October 23rd @ 5:30pm**

2025 Draft Budget Special Work Session

Monday, November 25th @ 6:00pm**

Public Hearing of 2025 Budget

Wednesday, December 11th @ 6:00pm**

Adopt 2025 Budget

Castle Pines North Metropolitan District
 7404 Yorkshire Dr, Castle Pines CO 80108 • (303)-688-8550 • www.cpnmd.org

All Graphics/Videos Shared



castlepinesnorthmetrodistrict 📢 Emergency Notification Test – Wednesday, September 25th

Attention Castle Pines North Metro Residents Residents:

On Wednesday, September 25th at 12:00 PM MT, we will be conducting an Emergency Notification Test. This test will include text messages to cell phones and phone calls to landlines.

This is just a test to ensure our system is ready to notify residents in case of an CPNMD alert. You do not need to respond to this test.

If you have any questions or issues receiving the notification, please email bailey@cpnmd.org

Thank you!

#CastlePinesNorthMetroDistrict #ColoradoWater #CastlePines
#CastlePinesCommunity #ColoradoWaterRights
#Coloradocommunity #Waterdistrict
#wastewatertreatmentplant

4w

All Graphics/Videos Shared



SERVICE NOTICE WATER MAIN BREAK

WHEN
**THURSDAY,
SEPTEMBER 26TH, 2024**

WHERE
**EAST OF YORKSHIRE
DRIVE ON CLARE COURT
AND BRIXHAM COURT**

Houses outlined to the right are affected.

ADDITIONAL DETAILS
Due to a water main break water has been shut off in the highlighted areas. We anticipate service will be restored in the next 6-8 hours.

Questions: Call 303-688-8550



castlepinesnorthmetrodistrict SERVICE DISRUPTION:

Due to a water main break water has been shut off in the highlighted areas.

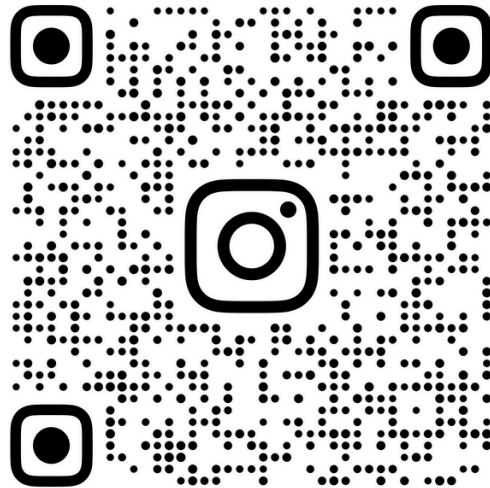
We anticipate service will be restored in the next 6-8 hours.

Questions: Please call 303-688-8550.

[#CPNMD](#) [#CastlePines](#)

3w

All Graphics/Videos Shared



REEL SHARED ON OCT 13, 2024
BY CASTLEPINESNORTHMETRODISTRICT



castlepinesnorthmetrodistrict The Castle Pines North Metropolitan Water District has officially joined the East Plum Creek Stabilization Project as part of our Supplemental Environmental Project (SEP) to address the 2023 wastewater discharge violation.

This initiative focuses on restoring a section of East Plum Creek through trash removal, stream bank stabilization, and improving overall river health.

Stay tuned for updates as we work towards making a lasting impact on our local ecosystem.

[#CastlePinesNorthMetroDistrict](#) [#ColoradoWater](#) [#CastlePines](#)
[#CastlePinesCommunity](#) [#Environmentalproject](#) [#SEP](#)
[#Coloradoecosystem](#) [#Coloradorivers](#)
[#EastPlumCreekColorado](#) [#ColoradoWaterRights](#)
[#Coloradocommunity](#) [#Waterdistrict](#)
[#wastewatertreatmentplant](#)

1w

All Graphics/Videos Shared

The graphic features a dark green header with the text 'UPCOMING BUDGET MEETINGS'. Below this, it states: 'We are conducting a series of meetings to review and discuss the 2025 budget, which will be open to the public for observation and engagement. The draft budget was sent to Board Members and available online beginning October 15th at <https://www.cpnmd.org/budget-information>'. A grid of six rounded rectangular buttons follows, each with a date and a meeting title. The first row has 'Wednesday, October 23rd @ 5:30pm' and 'Special Meeting Budget Work Session'. The second row has 'Monday, November 25th @ 6:00pm' and 'Public Hearing of 2025 Budget'. The third row has 'Wednesday, December 11th @ 6:00pm' and 'Adopt 2025 Budget'. Below the grid, it says: 'All meetings are hosted at the District Office, 7404 YORKSHIRE DR, CASTLE PINES CO 80108. If you are not able to attend in person, a Zoom link will be available at <https://www.cpnmd.org/board-meetings>'. The Castle Pines North Metropolitan District logo is at the bottom.

UPCOMING BUDGET MEETINGS

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CASTLE PINES NORTH
METROPOLITAN DISTRICT



castlepinesnorthmetrodistrict We are conducting a series of meetings to review and discuss the 2025 budget, which will be open to the public for observation and engagement. The draft budget was sent to Board Members and available online beginning October 15th.

All meetings are hosted at the District Office,
7404 YORKSHIRE DR, CASTLE PINES CO 80108

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View the 2025 Budget at:
<https://cpnmd.specialdistrict.org/budget-information>

[#CastlePinesNorthMetroDistrict](#) [#ColoradoWater](#) [#CastlePines](#)
[#CastlePinesCommunity](#) [#ColoradoWaterRights](#)
[#Coloradocommunity](#) [#Waterdistrict](#) [#Coloradocommunity](#)

All Graphics/Videos Shared



WHAT ARE THE LINE ITEMS FOR ON MY WATER BILL?

WATER USE CHARGE: Pays for actual water used and also pays for maintenance of more than 60 miles of water lines, and electricity for pumping of District - owned wells and water treatment.

CUSTOMER CHARGE - WATER: Applies to the District's day-to-day water-related operations, including, but not limited to: (a) transporting the District's seasonal renewable water through Centennial Water and Sanitation District's water treatment plant to our District's pump station and water distribution system, (b) maintaining and repairing water infrastructure (e.g., water treatment plant, ten groundwater wells and associated pumps), (c) paying for the electricity required to operate the District's renewable water pump station, groundwater well pumps, booster pumps, and the water treatment plant, (d) adjudicating and monitoring the District's water rights, (e) water quality monitoring and testing, (f) funding the water rebate program, and (g) staff.

CAPITAL IMPROVEMENT FEE - WATER: Applies to construction and/or acquisition of water-related infrastructure including, but not limited to: (a) the ICPP pump station & pipeline, (b) groundwater well replacement, (c) Chatfield Expansion & Reallocation Project, (d) water rights, and (e) future renewable water infrastructure.

WASTEWATER USE CHARGE: Pays for wastewater treatment at Plum Creek Water Reclamation Authority facility, electricity for nine wastewater lift systems, and the operation and maintenance costs for our wastewater collection system that consists of 7.5 miles of pipeline. Charges are based on average winter water consumption, and are billed equally each month, regardless of monthly water use fluctuations.

CUSTOMER CHARGE - WASTEWATER: Applies to the District's day-to-day wastewater-related operations, including, but not limited to lift station and sewage treatment operations.

www.cpnmd.org



castlepinesnorthmetrodistrict What do the line items represent on my water bill?

There are five line item categories outlined on your monthly water bill.

1. Water Use Charge
2. Customer Charge - Water
3. Capital Improvement Fee - Water
4. Wastewater Use Charge
5. Customer Charge - Wastewater

Have any questions? Please visit
<https://www.cpnmd.org/billing-and-account-questions-contact-form>

[#CastlePinesNorthMetroDistrict](#) [#ColoradoWater](#) [#CastlePines](#)
[#CastlePinesCommunity](#) [#ColoradoWaterRights](#)
[#Coloradocommunity](#) [#Waterdistrict](#) [#Coloradocommunity](#)

Email Communication

Emergency Notification

www.cpnmd.org

CASTLE PINES NORTH
METROPOLITAN DISTRICT

EMERGENCY NOTIFICATION TEST

WEDNESDAY, SEPTEMBER 25TH



On **Wednesday, September 25th at 12:00 PM MT**, we will be conducting an Emergency Notification Test.

This test will include text messages to cell phones and phone calls to landlines.

This is just a **test** to ensure our system is ready to notify residents in case of an CPNMD emergency.

You do not need to respond to this test.

Thank you for your cooperation in ensuring our community's safety!

If you have any questions or issues receiving the notification, please email bailey@cpnmd.org

Castle Pines North Metropolitan District
7404 Yorkshire Dr, Castle Pines CO 80108 • (303) 688-8550 • www.cpnmd.org


[CLICK HERE FOR MORE INFORMATION](#)

Email Communication

Water Main Break www.cpnmd.org

CASTLE PINES NORTH
METROPOLITAN DISTRICT

SERVICE NOTICE
WATER MAIN RBEAK



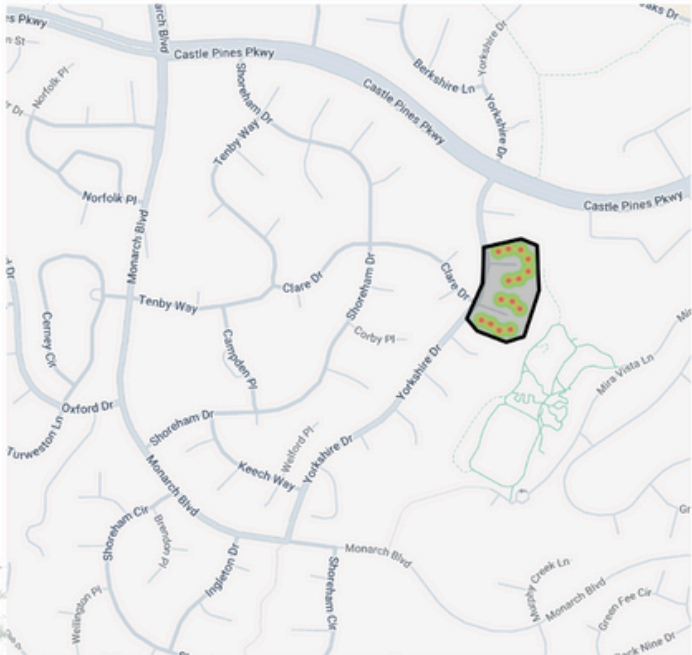
WHEN
THURSDAY,
SEPTEMBER 26TH, 2024

WHERE
EAST OF YORKSHIRE DRIVE ON
CLARE COURT AND BRIXHAM COURT

Houses outlined below are affected.

ADDITIONAL DETAILS
Due to a water main break water has been shut off in the highlighted areas. We anticipate service will be restored in the next 6-8 hours.

Questions: Call 303-688-8550



CALL 303-688-8550 FOR QUESTIONS

Email Communication

Fall and Winter Water Source Update

www.cpnmd.org

CASTLE PINES NORTH
 METROPOLITAN DISTRICT

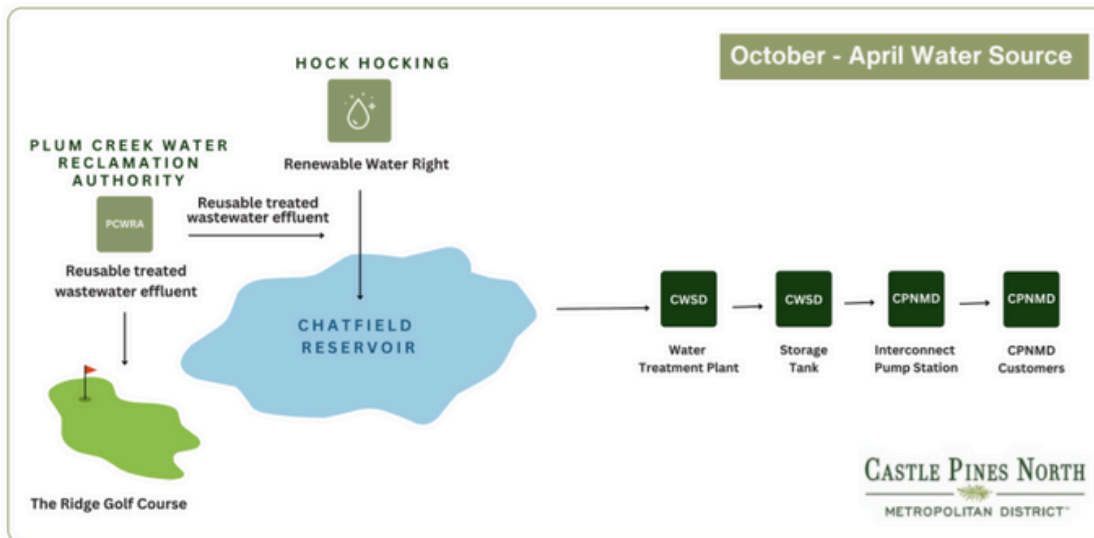
FALL AND WINTER WATER SOURCE UPDATE

We wanted to take a moment to explain the usual water sourcing and delivery to CPNMD residents during the Fall and Winter months, as well as the change in process for this year.

We are doing things a little differently this year! We typically utilize our CWSD renewable water resources from October 1st through April 30th of each year. Our neighbors to the north, Centennial Water & Sanitation District, treat our renewable water, which we then pump through our interconnect pump station and pipeline into our water distribution system.

However, this year, to facilitate a major CWSD Treatment plant upgrade and our own Filter Replacement Project set to begin in Fall of 2025, we will be deferring deliveries. We will only take deliveries from CWSD for a few weeks during October, before shutting down the interconnect for the bulk of the fall and winter months.

Next year, we plan to begin to take deliveries earlier than normal to allow for a prolonged shut down of our Water Treatment Plant, allowing us more time to complete our Filter Replacement Project.



Please [CLICK HERE](https://www.cpnmd.org/2024-water-quality-report) to view the Centennial Water and Sanitation District Water Quality Report or visit <https://www.cpnmd.org/2024-water-quality-report>

Email Communication

2025 Budget Meetings

www.cpnmd.org

CASTLE PINES NORTH
METROPOLITAN DISTRICT

UPCOMING BUDGET MEETINGS

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Adopt 2025 Budget

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Castle Pines North Metropolitan District
7404 Yorkshire Dr, Castle Pines CO 80108 • (303) 688-8550 • www.cpnmd.org

Email Communication

Water Bill Line Items

www.cpnmd.org

CASTLE PINES NORTH
METROPOLITAN DISTRICT

UNDERSTANDING YOUR WATER BILL

There are five line item categories outlined on your monthly water bill.
Please see the category insights below:

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Castle Pines North Metropolitan District
7404 Yorkshire Dr, Castle Pines CO 80108 • (303) 688-8550 • www.cpnmd.org



<i>TO:</i>	Castle Pines North Metropolitan District Board of Directors
<i>FROM:</i>	Andrea Manion and Phyllis Brown Community Resource Services of Colorado
<i>SUBJ:</i>	Financial Update
<i>DATE:</i>	10/28/2024

1. Property and Specific Ownership Tax

- Douglas County tax revenues for 2024 received by the District through September 2024 totaled \$1,136,842.36. 99.88% of budgeted property taxes from the District’s mill levy has been received YTD. Tax revenues for 2024 are allocated 75% to the Water Fund and 25% to the Wastewater Fund. Total taxes received include \$125,999 in backfill property taxes received pursuant to SB22-238.

2. Enterprise Fund Activity

- Billed water usage in the month of September 2024 was 93,912,000, a 35.25% increase from water usage in September 2023.

	Total Billable Usage (Gallons)									
	2020	Cumulative	2021	Cumulative	2022	Cumulative	2023	Cumulative	2024	Cumulative
January	17,293,004	17,293,004	18,151,000	18,151,000	20,046,000	20,046,000	26,439,000	26,439,000	20,217,000	20,217,000
February	14,982,003	32,275,007	17,457,000	35,608,000	20,853,100	40,899,100	17,334,000	43,773,000	16,844,000	37,061,000
March	16,335,744	48,610,751	17,858,000	53,466,000	16,836,000	57,735,100	17,766,000	61,539,000	17,744,000	54,805,000
April	24,158,000	72,768,751	18,712,000	72,178,000	41,324,000	99,059,100	24,839,000	86,378,000	25,517,000	80,322,000
May	71,928,000	144,696,751	35,457,000	107,635,000	84,723,000	183,782,100	37,307,000	123,685,000	44,494,000	124,816,000
June	102,094,000	246,790,751	94,733,000	202,368,000	111,124,000	294,906,100	45,739,003	169,424,003	104,276,000	229,092,000
July	103,182,000	349,972,751	108,586,000	310,954,000	105,870,004	400,776,104	82,846,000	252,270,003	111,770,000	340,862,000
August	129,364,000	479,336,751	115,338,000	426,292,000	77,481,009	478,257,113	77,494,000	329,764,003	90,502,000	431,364,000
September	82,736,000	562,072,751	99,888,000	526,180,000	73,357,011	551,614,124	69,434,000	399,198,003	93,912,000	525,276,000
October	50,520,000	612,592,751	46,326,000	572,506,000	46,674,005	598,288,129	61,514,000	460,712,003		525,276,000
November	20,576,000	633,168,751	20,919,000	593,425,000	29,710,000	627,998,129	20,852,000	481,564,003		525,276,000
December	17,717,000	650,885,751	18,294,000	611,719,000	29,684,000	657,682,129	17,116,000	498,680,003		525,276,000

- Billed sewer usage was 18,782,471 for September 2024 vs 19,372,881 for September 2023, a 3.05% decrease.
- Water and sewer revenues for the month of September 2024 was \$908,544 vs \$782,949 in September 2023, a 16.04% increase.

3. The following table summarizes year-to-date accounts receivable and revenues activity:

YTD ACCOUNTS RECEIVABLE AND REVENUES (unaudited)				
	BEGINNING BALANCE	REVENUES	PAYMENTS/ ADJUSTMENTS	ENDING BALANCE
1/31/2024	\$ 585,017	\$ 515,917	\$ (531,603)	\$ 569,331
2/29/2024	569,331	488,526	(486,945)	570,912
3/31/2024	570,912	488,285	(503,301)	555,896
4/30/2024	555,896	522,496	(501,217)	577,175
5/31/2024	577,175	616,206	(524,679)	668,702
6/30/2024	668,702	1,028,767	(582,588)	1,114,881
7/31/2024	1,114,881	1,042,124	(938,347)	1,218,658
8/31/2024	1,218,658	891,549	(1,061,700)	1,048,507
9/30/2024	1,048,507	908,544	(922,825)	1,034,226
YTD		\$ 6,502,414	\$ (6,053,205)	

4. The following table summarizes 2024 year-to-date monthly disbursements summary:

YEAR-TO-DATE DISBURSEMENTS SUMMARY (unaudited)		
BOARD MEETING MONTH	DISBURSEMENT DATES	TOTAL
JANUARY	11/23/23-1/17/24	\$ 2,411,664.17
FEBRUARY	1/18/24-2/20/24	320,025.45
MARCH	2/21/24-3/20/24	928,382.08
APRIL	3/21/24-4/17/24	853,659.13
MAY	4/18/24-5/20/24	2,024,326.64
JUNE	5/21/24-6/19/24	1,012,160.09
JULY	6/20/24-7/18/24	585,041.19
AUGUST	7/19/24-8/21/24	897,004.78
SEPTEMBER	8/22/24-9/19/24	508,843.64
OCTOBER	9/19/24-10/22/2024	3,579,452.80
		\$ 13,120,559.97

5. The following table summarizes 2024 year-to-date cash activity by month:

CASH BALANCE BY MONTH - unaudited				
	CITYWIDE	COLOTRUST	1ST BANK	TOTAL
12/31/2023 - per audit	\$ 290,078	\$ 50,746,957	\$ 99,985	\$ 51,137,020
1/31/2024	417,535	50,986,294	99,985	51,503,814
2/29/2024	460,746	51,222,304	99,985	51,783,035
3/31/2024	708,037	51,217,661	99,985	52,025,683
4/30/2024	937,810	50,696,787	99,985	51,734,582
5/31/2024	845,692	51,081,027	99,985	52,026,704
6/30/2024	850,063	51,481,803	99,985	52,431,851
7/31/2024	1,080,224	52,041,814	99,985	53,222,023
8/31/2024	1,833,682	52,295,245	99,985	54,228,912
9/30/2024	1,910,347	52,528,488	99,985	54,538,820

CASTLE PINES NORTH METROPOLITAN DISTRICT
Property Taxes Reconciliation
2024
Unaudited

ASSESSED VALUATION	\$ 276,365,860
MILL LEVY	7.000
TEMPORARY MILL LEVY REDUCTION	(3.500)
	3.500
PROPERTY TAXES	\$ 967,281

	Current Year								Cumulative 2024	
	Property Taxes	Delinquent Taxes, Rebates and Abatements	Specific Ownership Taxes	Interest	Treasurer's Fees	Net Amount Received	Property Taxes Received	% of Total 2024 Property Taxes Received		
								Monthly	Y-T-D	
January	\$ 5,697.10	\$ -	\$ 6,959.68	\$ -	\$ (85.47)	\$ 12,571.31	\$ 5,697.10	0.59%	0.59%	
February	397,879.15	-	5,920.31	-	(5,968.15)	397,831.31	403,576.25	40.88%	41.46%	
March	46,836.18	-	5,517.57	25.13	(702.96)	51,675.92	450,412.43	4.81%	46.27%	
April	133,829.72	13,570.13	6,024.49	11.07	(2,205.06)	151,230.35	597,812.28	15.14%	61.42%	
May	44,070.10	-	5,808.20	60.64	(2,557.98)	47,380.96	641,882.38	4.53%	65.94%	
May - backfill taxes	-	125,999.06	-	-	-	125,999.06				
June	320,976.75	(22.29)	5,771.18	121.52	(4,816.14)	322,031.02	963,913.40	32.97%	98.92%	
July	8,163.40	-	6,370.82	195.32	(125.37)	14,604.17	972,076.80	0.84%	99.76%	
August	588.47	(5.88)	6,336.59	19.49	(9.02)	6,929.65	972,659.39	0.06%	99.82%	
September	716.55	(63.54)	5,911.65	34.31	(10.36)	6,588.61	973,312.40	0.07%	99.88%	
October						-	973,312.40	0.00%	99.88%	
November						-	973,312.40	0.00%	99.88%	
December						-	973,312.40	0.00%	99.88%	
	\$ 958,757.42	\$ 139,477.48	\$ 54,620.49	\$ 467.48	\$ (16,480.51)	\$ 1,136,842.36		99.88%	99.88%	

Water 75%	Wastewater 25%	Total 100%
\$ 9,428.49	\$ 3,142.82	\$ 12,571.31
298,373.58	99,457.73	397,831.31
38,756.96	12,918.96	51,675.92
113,422.81	37,807.54	151,230.35
35,535.73	11,845.23	47,380.96
94,499.33	31,499.73	125,999.06
241,523.35	80,507.67	322,031.02
10,953.13	3,651.04	14,604.17
5,197.23	1,732.42	6,929.65
4,941.46	1,647.15	6,588.61
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
\$ 852,632.07	\$ 284,210.29	\$ 1,136,842.36

**Castle Pines North Metropolitan District
Disbursements Summary
For the Period September 19, 2024 - October 22, 2024
TO BE RATIFIED**

CHECKS - 28828 through 28904

Amount

September 19, 2024 - September 30, 2024
October 1, 2024 - October 22, 2024

\$ 491,275.54
3,046,867.51

TOTAL CHECKS TO BE RATIFIED

\$ 3,538,143.05

ELECTRONIC PAYMENTS

September 19, 2024 - September 30, 2024
October 1, 2024 - October 22, 2024

\$ 21,572.44
19,737.31

TOTAL ELECTRONIC PAYMENTS TO BE RATIFIED

\$ 41,309.75

Total Payments to be Ratified

\$ 3,579,452.80

Castle Pines North Metropolitan District
Electronic Payments Report
For the Period September 19, 2024 - October 22, 2024
TO BE RATIFIED

	Amount
<u>Electronic Payments</u>	
Xcel (Month-End September)	\$ 791.13
Payroll & payroll related items (Month-End September)	15,708.53
Payroll & payroll related items (Mid-Month October)	15,054.35
Bank Service Charges	1,036.80
United Healthcare	3,646.16
Citywide Visa Credit Card Payment	4,795.73
Total Electronic Payments	\$ 41,032.70

Castle Pines North Board of Directors

J. Blanckaert - Payment for Meeting Attendance	\$ 92.35
T. Radloff - Payment for Meeting Attendance	-
J. Krell - Payment for Meeting Attendance	92.35
L. Engquist - Payment for Meeting	92.35
J. Mulvey - No payment	-
Total payments to Board of Directors	\$ 277.05

Total Electronic Payments to be Ratified - All funds	\$ 41,309.75
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Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Bartle Wells Associates	Computer Check 28828	09/19/2024	09/19/2024 Posted	\$2,190.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$2,190.00	\$2,190.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
559C-1001	09/10/2024	Rate Study-BWA Job #	\$2,190.00	\$2,190.00	60-60-00-5419	Professional Svcs- Rates and Fee:		\$1,423.50
559C-1001	09/10/2024	Rate Study-BWA Job #	\$2,190.00	\$2,190.00	60-61-00-5419	Professional Svcs- Rates and Fee:		\$766.50
						<i>Totals:</i>		\$2,190.00
Broken Arrow Landscape & De	Computer Check 28829	09/19/2024	09/19/2024 Posted	\$4,660.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$4,660.00	\$4,660.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
0005-2024	08/26/2024	WTP-Landscaping & 7i	\$4,660.00	\$4,660.00	60-60-00-5330	Water Treatment Plant R&M		\$1,960.00
0005-2024	08/26/2024	WTP-Landscaping & 7i	\$4,660.00	\$4,660.00	60-61-00-5370	Collection - Repair and Maintena		\$2,700.00
						<i>Totals:</i>		\$4,660.00
Castle Pines Connection	Computer Check 28830	09/19/2024	09/19/2024 Posted	\$2,000.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$2,000.00	\$2,000.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
14198	08/01/2024	Full Page Ad	\$2,000.00	\$2,000.00	60-60-00-5169	Communications - Public Outrea		\$1,300.00
14198	08/01/2024	Full Page Ad	\$2,000.00	\$2,000.00	60-61-00-5169	Communications - Public Outrea		\$700.00
						<i>Totals:</i>		\$2,000.00
Comcast Business	Computer Check 28831	09/19/2024	09/19/2024 Posted	\$777.70	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$777.70	\$777.70 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
217384703	09/01/2024	Ethernet Internet-7404	\$777.70	\$777.70	60-60-00-5201	Telephone/Alarms		\$505.51
217384703	09/01/2024	Ethernet Internet-7404	\$777.70	\$777.70	60-61-00-5201	Telephone/Alarms		\$272.19
						<i>Totals:</i>		\$777.70
COMCAST	Computer Check 28832	09/19/2024	09/19/2024 Posted	\$133.96	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$133.96	\$133.96 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
8497202420309499	09/02/2024	HS Internet-7404 Yorks	\$133.96	\$133.96	60-60-00-5201	Telephone/Alarms		\$133.96
						<i>Totals:</i>		\$133.96
Community Resource Services	Computer Check 28833	09/19/2024	09/19/2024 Posted	\$38,533.50	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$38,533.50	\$38,533.50 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
	08/31/2024	Finance & Billing Servic	\$38,533.50	\$38,533.50	60-60-00-5145	Accounting and Payroll		\$25,046.78
	08/31/2024	Finance & Billing Servic	\$38,533.50	\$38,533.50	60-61-00-5145	Accounting and Payroll		\$13,486.72

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		
							<i>Totals:</i>	\$38,533.50
CORE Electric Coop	Computer Check 28834	09/19/2024	09/19/2024 Posted	\$104,182.06	60-00-00-1127	Citywide Bank	\$0.00	\$104,182.06
					60-00-00-2100	Accounts Payable Co	\$104,182.06	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		
23793000	09/04/2024	Electrical Service-Augu	\$104,182.06	\$104,182.06	60-60-00-5202	Electricity & Natural Gas		\$301.61
23793000	09/04/2024	Electrical Service-Augu	\$104,182.06	\$104,182.06	60-60-00-5206	Electricity for Well Pumping		\$82,342.49
23793000	09/04/2024	Electrical Service-Augu	\$104,182.06	\$104,182.06	60-60-00-5207	Electricity for WTP		\$12,947.18
23793000	09/04/2024	Electrical Service-Augu	\$104,182.06	\$104,182.06	60-60-00-5208	Electricity for Booster Pump Stati		\$2,052.06
23793000	09/04/2024	Electrical Service-Augu	\$104,182.06	\$104,182.06	60-60-00-5330	Water Treatment Plant R&M		\$105.05
23793000	09/04/2024	Electrical Service-Augu	\$104,182.06	\$104,182.06	60-61-00-5202	Electricity & Natural Gas		\$162.40
23793000	09/04/2024	Electrical Service-Augu	\$104,182.06	\$104,182.06	60-61-00-5209	Electricity for Wastewater Pumpir		\$6,271.27
							<i>Totals:</i>	\$104,182.06
DTC Print Brokers	Computer Check 28835	09/19/2024	09/19/2024 Posted	\$795.00	60-00-00-1127	Citywide Bank	\$0.00	\$795.00
					60-00-00-2100	Accounts Payable Co	\$795.00	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		
2337	09/06/2024	Bill Inserts- 8/31/24 Bil	\$795.00	\$795.00	60-60-00-5169	Communications - Public Outrea		\$516.75
2337	09/06/2024	Bill Inserts- 8/31/24 Bil	\$795.00	\$795.00	60-61-00-5169	Communications - Public Outrea		\$278.25
							<i>Totals:</i>	\$795.00
EPR	Computer Check 28836	09/19/2024	09/19/2024 Posted	\$16,447.64	60-00-00-1127	Citywide Bank	\$0.00	\$16,447.64
					60-00-00-2100	Accounts Payable Co	\$16,447.64	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		
3853	09/17/2024	1055 Deer Clover Way-	\$16,447.64	\$16,447.64	60-60-00-5360	Water Distribution R&M		\$16,447.64
							<i>Totals:</i>	\$16,447.64
Family Support Registry	Computer Check 28837	09/19/2024	09/19/2024 Posted	\$286.50	60-00-00-1127	Citywide Bank	\$0.00	\$286.50
					60-00-00-2100	Accounts Payable Co	\$286.50	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		
	09/15/2024	Wage Garnishment-FS	\$286.50	\$286.50	60-00-00-2110	Misc Accounts Payable		\$286.50
							<i>Totals:</i>	\$286.50
Hamre Rodriguez Ostrander	Computer Check 28838	09/19/2024	09/19/2024 Posted	\$474.00	60-00-00-1127	Citywide Bank	\$0.00	\$474.00
					60-00-00-2100	Accounts Payable Co	\$474.00	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		
15419	08/31/2024	Legal Service-Water Ri	\$474.00	\$474.00	60-60-00-5400	Professional Svcs - Water Rights		\$474.00
							<i>Totals:</i>	\$474.00

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Hazen Research Inc.	Computer Check 28839	09/19/2024	09/19/2024 Posted	\$1,056.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$1,056.00	\$1,056.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
162011A	09/10/2024	Lab Analysis	\$1,056.00	\$1,056.00	60-60-00-7756	WTP Filter Rehabilitation Program	\$1,056.00	
<i>Totals:</i>							\$1,056.00	
Kennedy Jenks Consultants Inc	Computer Check 28840	09/19/2024	09/19/2024 Posted	\$75,163.49	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$75,163.49	\$75,163.49 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
174378	09/06/2024	Lagae Family Parcel	\$1,091.54	\$1,091.54	60-60-00-5165	Engineering Services Reimbursab	\$1,091.54	
<i>Totals:</i>							\$1,091.54	
174379	09/06/2024	Lift Stations Permitting	\$24,395.15	\$24,395.15	60-61-00-7766	Waste Water - Lift Station Renov	\$24,395.15	
<i>Totals:</i>							\$24,395.15	
174380	09/06/2024	Liquid Ammonia Sulfat	\$7,731.45	\$7,731.45	60-60-00-7754	Backwash Reclaim Tank Upgrade	\$7,731.45	
<i>Totals:</i>							\$7,731.45	
174381	09/06/2024	Well Vaults Rehabilitati	\$2,042.69	\$2,042.69	60-60-00-7760	Well Control Vault Rehab Progra	\$2,042.69	
<i>Totals:</i>							\$2,042.69	
174382	09/06/2024	Yorkshire Water Line R	\$1,618.92	\$1,618.92	60-60-00-7768	Yorkshire Water Line Replacemer	\$1,618.92	
<i>Totals:</i>							\$1,618.92	
174383	09/06/2024	Facility Documentation	\$13,988.81	\$13,988.81	60-60-00-7755	WTP Site Plan / O&M Manual De	\$13,988.81	
<i>Totals:</i>							\$13,988.81	
174384	09/06/2024	Monarch Water Line Re	\$12,073.28	\$12,073.28	60-60-00-7767	Monarch Waterline Replacement	\$12,073.28	
<i>Totals:</i>							\$12,073.28	
174385	09/06/2024	Filter Beds Upgrade-Pil	\$921.34	\$921.34	60-60-00-7756	WTP Filter Rehabilitation Program	\$921.34	
<i>Totals:</i>							\$921.34	
174386	09/06/2024	2024 General Engineer	\$2,652.43	\$2,652.43	60-60-00-5175	Engineering	\$2,210.15	
174386	09/06/2024	2024 General Engineer	\$2,652.43	\$2,652.43	60-61-00-5164	Engineering Services	\$442.28	
<i>Totals:</i>							\$2,652.43	
174387	09/06/2024	Monarch Water Line Re	\$5,998.72	\$5,998.72	60-60-00-7767	Monarch Waterline Replacement	\$5,998.72	
<i>Totals:</i>							\$5,998.72	
174388	09/06/2024	Lead & Copper Rule Re	\$2,649.16	\$2,649.16	60-60-00-5175	Engineering	\$2,649.16	
<i>Totals:</i>							\$2,649.16	
Level Engineering and Inspecti	Computer Check 28841	09/19/2024	09/19/2024 Posted	\$57,740.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$57,740.00	\$57,740.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
2024-8	09/06/2024	Contract 17571- Gen C	\$17,180.00	\$17,180.00	60-60-00-5164	Engineering Services	\$1,519.38	
2024-8	09/06/2024	Contract 17571- Gen C	\$17,180.00	\$17,180.00	60-60-00-5999	Parks, Trails and Open Space - IG	\$9,281.19	
2024-8	09/06/2024	Contract 17571- Gen C	\$17,180.00	\$17,180.00	60-61-00-5164	Engineering Services	\$818.12	

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
2024-8	09/06/2024	Contract 17571- Gen C	\$17,180.00	\$17,180.00	60-61-00-5410	Collection - Chemical Treatment		\$563.75
2024-8	09/06/2024	Contract 17571- Gen C	\$17,180.00	\$17,180.00	60-61-00-5999	Parks, Trails and Open Space - IG		\$4,997.56
						<i>Totals:</i>		\$17,180.00
Task Order #3	09/16/2024	Parcel Transfer Project	\$40,560.00	\$40,560.00	60-60-00-5999	Parks, Trails and Open Space - IG		\$26,364.00
Task Order #3	09/16/2024	Parcel Transfer Project	\$40,560.00	\$40,560.00	60-61-00-5999	Parks, Trails and Open Space - IG		\$14,196.00
						<i>Totals:</i>		\$40,560.00
Mountain Peak Controls Inc.	Computer Check 28842	09/19/2024	09/19/2024 Posted	\$2,320.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$2,320.00	\$2,320.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
30689	09/17/2024	LS 3- Antenna Install &	\$1,015.00	\$1,015.00	60-61-00-5370	Collection - Repair and Maintena		\$1,015.00
						<i>Totals:</i>		\$1,015.00
30690	09/17/2024	Document DE7 Wiring	\$1,015.00	\$1,015.00	60-60-00-5320	Wells R&M		\$1,015.00
						<i>Totals:</i>		\$1,015.00
30696	09/17/2024	Tank 1 Offset & Alarm	\$290.00	\$290.00	60-60-00-5360	Water Distribution R&M		\$290.00
						<i>Totals:</i>		\$290.00
Office Depot Business Credit	Computer Check 28843	09/19/2024	09/19/2024 Posted	\$232.82	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$232.82	\$232.82 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
8660	09/05/2024	Office Supplies	\$232.82	\$232.82	60-60-00-5223	Operating Supplies		\$151.34
8660	09/05/2024	Office Supplies	\$232.82	\$232.82	60-61-00-5223	Operating Supplies		\$81.48
						<i>Totals:</i>		\$232.82
Pathian Administrators	Computer Check 28844	09/19/2024	09/19/2024 Posted	\$77.98	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$77.98	\$77.98 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
204504	09/08/2024	Vision Insurance-Octot	\$77.98	\$77.98	60-60-00-5124	Employer Contr. Health Insurance		\$50.69
204504	09/08/2024	Vision Insurance-Octot	\$77.98	\$77.98	60-61-00-5124	Employer Contr. Health Insurance		\$27.29
						<i>Totals:</i>		\$77.98
Plum Creek Water Reclamation	Computer Check 28845	09/19/2024	09/19/2024 Posted	\$66,695.93	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$66,695.93	\$66,695.93 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
CPNMD0824	09/03/2024	Wastewater Treatment	\$60,695.70	\$60,695.70	60-61-00-5167	PCWRA Sewer Fees		\$60,695.70
						<i>Totals:</i>		\$60,695.70
RCPN0824	09/03/2024	Pond 16-August	\$6,000.23	\$6,000.23	60-60-00-5205	Reuse Pumping		\$6,000.23
						<i>Totals:</i>		\$6,000.23

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
PURCHASE POWER	Computer Check 28846	09/19/2024	09/19/2024 Posted	\$502.25	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$502.25	\$502.25 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Debit Amount	Credit Amount
8000-9090-0231-7639	09/11/2024	Postage Meter Refill	\$502.25	\$502.25	60-60-00-5221	Postage & Freight		\$326.46
8000-9090-0231-7639	09/11/2024	Postage Meter Refill	\$502.25	\$502.25	60-61-00-5221	Postage & Freight		\$175.79
<i>Totals:</i>								\$502.25
QP Services LLC	Computer Check 28847	09/19/2024	09/19/2024 Posted	\$74,918.69	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$74,918.69	\$74,918.69 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Debit Amount	Credit Amount
PJINV001641	08/31/2024	2024 MH Rehab	\$74,918.69	\$74,918.69	60-61-00-5370	Collection - Repair and Maintena		\$74,918.69
<i>Totals:</i>								\$74,918.69
Seter, Vander Wall & Mielke, P.	Computer Check 28848	09/19/2024	09/19/2024 Posted	\$21,195.87	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$21,195.87	\$21,195.87 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Debit Amount	Credit Amount
87408	08/31/2024	Legal Service-August	\$21,195.87	\$21,195.87	60-60-00-5163	Legal Services		\$13,777.32
87408	08/31/2024	Legal Service-August	\$21,195.87	\$21,195.87	60-61-00-5163	Legal Services		\$7,418.55
<i>Totals:</i>								\$21,195.87
TW Summit Corporation	Computer Check 28849	09/19/2024	09/19/2024 Posted	\$11,609.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$11,609.00	\$11,609.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Debit Amount	Credit Amount
32386	09/11/2024	Air Valve Repair-7205 I	\$1,753.75	\$1,753.75	60-60-00-5360	Water Distribution R&M		\$1,753.75
<i>Totals:</i>								\$1,753.75
32387	09/17/2024	Hydrant Painting-Prog	\$9,855.25	\$9,855.25	60-60-00-5360	Water Distribution R&M		\$9,855.25
<i>Totals:</i>								\$9,855.25
United States Geological Surve	Computer Check 28850	09/19/2024	09/19/2024 Posted	\$4,685.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$4,685.00	\$4,685.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Debit Amount	Credit Amount
91194824	09/11/2024	33.3% Ops & Maintenc	\$4,685.00	\$4,685.00	60-60-00-5320	Wells R&M		\$4,685.00
<i>Totals:</i>								\$4,685.00
VIP Video Productions	Computer Check 28851	09/19/2024	09/19/2024 Posted	\$4,000.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$4,000.00	\$4,000.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Debit Amount	Credit Amount
9344	09/18/2024	Board Meetings-Video	\$4,000.00	\$4,000.00	60-60-00-5169	Communications - Public Outrea		\$2,600.00
9344	09/18/2024	Board Meetings-Video	\$4,000.00	\$4,000.00	60-61-00-5169	Communications - Public Outrea		\$1,400.00

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
						<i>Totals:</i>		\$4,000.00
Xerox Financial Services	Computer Check 28852	09/19/2024	09/19/2024 Posted	\$598.15	60-00-00-1127	Citywide Bank	\$0.00	\$598.15
					60-00-00-2100	Accounts Payable Co	\$598.15	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
6225966	09/11/2024	Copy Machine Lease-S	\$598.15	\$598.15	60-60-00-5222	Printing & Copying		\$388.80
6225966	09/11/2024	Copy Machine Lease-S	\$598.15	\$598.15	60-61-00-5222	Printing & Copying		\$209.35
						<i>Totals:</i>		\$598.15
360 Underground Ltd	Computer Check 28853	10/02/2024	10/02/2024 Posted	\$3,955.00	60-00-00-1127	Citywide Bank	\$0.00	\$3,955.00
					60-00-00-2100	Accounts Payable Co	\$3,955.00	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
24141	08/19/2024	Locate Service- August	\$3,955.00	\$3,955.00	60-60-00-5361	Underground Utility Locates		\$2,570.75
24141	08/19/2024	Locate Service- August	\$3,955.00	\$3,955.00	60-61-00-5361	Underground Utility Locates		\$1,384.25
						<i>Totals:</i>		\$3,955.00
Attention To Detail Painters	Computer Check 28854	10/02/2024	10/02/2024 Posted	\$3,210.00	60-00-00-1127	Citywide Bank	\$0.00	\$3,210.00
					60-00-00-2100	Accounts Payable Co	\$3,210.00	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
	08/22/2024	Painting-Upstairs Meet	\$3,210.00	\$3,210.00	60-60-00-5310	Building Repair & Maint		\$2,086.50
	08/22/2024	Painting-Upstairs Meet	\$3,210.00	\$3,210.00	60-61-00-5310	Building Repair & Maint		\$1,123.50
						<i>Totals:</i>		\$3,210.00
Backflow Secure; Management	Computer Check 28855	10/02/2024	10/02/2024 Posted	\$9,000.00	60-00-00-1127	Citywide Bank	\$0.00	\$9,000.00
					60-00-00-2100	Accounts Payable Co	\$9,000.00	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
817	09/15/2024	Backflow Services Prog	\$9,000.00	\$9,000.00	60-60-00-5417	Professional Svcs - Backflow Proc		\$9,000.00
						<i>Totals:</i>		\$9,000.00
Castle Pines Connection	Computer Check 28856	10/02/2024	10/02/2024 Posted	\$2,000.00	60-00-00-1127	Citywide Bank	\$0.00	\$2,000.00
					60-00-00-2100	Accounts Payable Co	\$2,000.00	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
14371	10/01/2024	Full Page Ad	\$2,000.00	\$2,000.00	60-60-00-5169	Communications - Public Outrea		\$1,300.00
14371	10/01/2024	Full Page Ad	\$2,000.00	\$2,000.00	60-61-00-5169	Communications - Public Outrea		\$700.00
						<i>Totals:</i>		\$2,000.00
CenturyLink	Computer Check 28857	10/02/2024	10/02/2024 Posted	\$173.07	60-00-00-1127	Citywide Bank	\$0.00	\$173.07
					60-00-00-2100	Accounts Payable Co	\$173.07	\$0.00

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
334174650	09/25/2024	Fire Alarm Phone Line-	\$173.07	\$173.07	60-60-00-5201	Telephone/Alarms		\$173.07
						<i>Totals:</i>		\$173.07
City of Castle Pines	Computer Check 28858	10/02/2024	10/02/2024 Posted	\$1,959,479.54	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$1,959,479.54	\$1,959,479.54 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
23274	05/03/2024	Monarch Blvd.-Ph 1-Pa	\$618,976.19	\$618,976.19	60-60-00-7767	Monarch Waterline Replacement		\$618,976.19
						<i>Totals:</i>		\$618,976.19
23276	06/12/2024	Monarch Blvd-Ph1-Pay	\$500,203.26	\$500,203.26	60-60-00-7767	Monarch Waterline Replacement		\$500,203.26
						<i>Totals:</i>		\$500,203.26
23282	09/05/2024	Monarch Blvd-Ph 1-Pa	\$203,728.15	\$203,728.15	60-60-00-7767	Monarch Waterline Replacement		\$203,728.15
						<i>Totals:</i>		\$203,728.15
23283	09/05/2024	Monarch Blvd-Ph 1-Pa	\$337,808.51	\$337,808.51	60-60-00-7767	Monarch Waterline Replacement		\$337,808.51
						<i>Totals:</i>		\$337,808.51
23284	09/05/2024	Monarch Blvd-Ph 1-Pa	\$298,763.43	\$298,763.43	60-60-00-7767	Monarch Waterline Replacement		\$298,763.43
						<i>Totals:</i>		\$298,763.43
COMCAST	Computer Check 28859	10/02/2024	10/02/2024 Posted	\$375.14	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$375.14	\$375.14 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
8497202420365418	09/18/2024	HS Internet-WTP	\$375.14	\$375.14	60-60-00-5201	Telephone/Alarms		\$375.14
						<i>Totals:</i>		\$375.14
Companion Life	Computer Check 28860	10/02/2024	10/02/2024 Posted	\$329.46	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$329.46	\$329.46 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
833558	09/21/2024	Dental Insurance-Octo	\$329.46	\$329.46	60-60-00-5124	Employer Contr. Health Insurance		\$214.15
833558	09/21/2024	Dental Insurance-Octo	\$329.46	\$329.46	60-61-00-5124	Employer Contr. Health Insurance		\$115.31
						<i>Totals:</i>		\$329.46
Elara Creatives	Computer Check 28861	10/02/2024	10/02/2024 Posted	\$6,325.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$6,325.00	\$6,325.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
2770DD99-0011	10/02/2024	Digital Marketing, Corr	\$6,325.00	\$6,325.00	60-60-00-5169	Communications - Public Outreach		\$4,111.25
2770DD99-0011	10/02/2024	Digital Marketing, Corr	\$6,325.00	\$6,325.00	60-61-00-5169	Communications - Public Outreach		\$2,213.75
						<i>Totals:</i>		\$6,325.00
EPR	Computer Check	10/02/2024	10/02/2024	\$9,445.52	60-00-00-1127	Citywide Bank	\$0.00	\$9,445.52

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
	28862		Posted		60-00-00-2100	Accounts Payable Co	\$9,445.52	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
3859	09/19/2024	7918 Glen Ridge Dr- Ci	\$9,445.52	\$9,445.52	60-60-00-5360	Water Distribution R&M		\$9,445.52
<i>Totals:</i>								\$9,445.52
Family Support Registry	Computer Check 28863	10/02/2024	10/02/2024 Posted	\$286.50	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$286.50	\$286.50 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
	09/30/2024	Wage Garnishment-FSI	\$286.50	\$286.50	60-00-00-2110	Misc Accounts Payable		\$286.50
<i>Totals:</i>								\$286.50
Greystone Technology Group	Computer Check 28864	10/02/2024	10/02/2024 Posted	\$1,876.86	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$1,876.86	\$1,876.86 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
89490	09/16/2024	Cloud Service-August	\$174.36	\$174.36	60-60-00-5166	Software Support		\$113.33
89490	09/16/2024	Cloud Service-August	\$174.36	\$174.36	60-61-00-5166	Software Support		\$61.03
<i>Totals:</i>								\$174.36
89775	10/01/2024	IT Service- October	\$1,702.50	\$1,702.50	60-60-00-5166	Software Support		\$1,106.63
89775	10/01/2024	IT Service- October	\$1,702.50	\$1,702.50	60-61-00-5166	Software Support		\$595.87
<i>Totals:</i>								\$1,702.50
HBS	Computer Check 28865	10/02/2024	10/02/2024 Posted	\$336.45	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$336.45	\$336.45 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
FR4615887	09/30/2024	Trash Service-7404 Yor	\$336.45	\$336.45	60-60-00-5204	Trash Removal		\$218.69
FR4615887	09/30/2024	Trash Service-7404 Yor	\$336.45	\$336.45	60-61-00-5204	Trash Removal		\$117.76
<i>Totals:</i>								\$336.45
Highlands Ranch Metro District	Computer Check 28866	10/02/2024	10/02/2024 Posted	\$51.50	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$51.50	\$51.50 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
97288	09/30/2024	Pump Station	\$51.50	\$51.50	60-60-00-5374	Centennial Delivery Charges		\$51.50
<i>Totals:</i>								\$51.50
Jehn Water Consultants Inc.	Computer Check 28867	10/02/2024	10/02/2024 Posted	\$7,043.99	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$7,043.99	\$7,043.99 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
125.1/10-24	10/01/2024	General Water Rights	\$5,519.50	\$5,519.50	60-60-00-5167	Professional Services - Water Rig		\$5,519.50
<i>Totals:</i>								\$5,519.50

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
125.6/10-24	10/01/2024	Resume Review	\$80.00	\$80.00	60-60-00-5167	Professional Services - Water Rig		\$80.00
						<i>Totals:</i>		\$80.00
871.1/10-24	10/01/2024	Hock Hocking Share-S	\$1,444.49	\$1,444.49	60-60-00-5316	Ditch/Land Rights Operating Exp		\$1,444.49
						<i>Totals:</i>		\$1,444.49
Layne Christensen Company	Computer Check 28868	10/02/2024	10/02/2024 Posted	\$54,725.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$54,725.00	\$54,725.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
2804695	09/24/2024	Well A2- Remove Pum	\$45,250.00	\$45,250.00	60-60-00-5320	Wells R&M		\$45,250.00
						<i>Totals:</i>		\$45,250.00
2808018	09/30/2024	Well A-6 VFD & Replac	\$9,475.00	\$9,475.00	60-60-00-5320	Wells R&M		\$9,475.00
						<i>Totals:</i>		\$9,475.00
M Gilmore Electric LLC	Computer Check 28869	10/02/2024	10/02/2024 Posted	\$89,900.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$89,900.00	\$89,900.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
3991	09/30/2024	Well- VFD Replacemen	\$89,900.00	\$89,900.00	60-60-00-5320	Wells R&M		\$89,900.00
						<i>Totals:</i>		\$89,900.00
Mountain Peak Controls Inc.	Computer Check 28870	10/02/2024	10/02/2024 Posted	\$27,850.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$27,850.00	\$27,850.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
30708	09/24/2024	Well Rehab Project-In-	\$26,762.50	\$26,762.50	60-60-00-5320	Wells R&M		\$26,762.50
						<i>Totals:</i>		\$26,762.50
30715	09/30/2024	Swap Chemical Pumps	\$797.50	\$797.50	60-60-00-5330	Water Treatment Plant R&M		\$797.50
						<i>Totals:</i>		\$797.50
30716	09/30/2024	LS3- Pump 1 Auto Star	\$290.00	\$290.00	60-61-00-5370	Collection - Repair and Maintena		\$290.00
						<i>Totals:</i>		\$290.00
Pitney Bowes Inc.	Computer Check 28871	10/02/2024	10/02/2024 Posted	\$218.82	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$218.82	\$218.82 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
1026160405	09/28/2024	Postage Meter Fee & S	\$218.82	\$218.82	60-60-00-5221	Postage & Freight		\$142.24
1026160405	09/28/2024	Postage Meter Fee & S	\$218.82	\$218.82	60-61-00-5221	Postage & Freight		\$76.58
						<i>Totals:</i>		\$218.82
Quality of Colorado Inc	Computer Check 28872	10/02/2024	10/02/2024 Posted	\$120.76	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$120.76	\$120.76 \$0.00

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
<u>Invoice #</u>	<u>Invoice Date</u>	<u>Description</u>	<u>Invoice Amount</u>	<u>Amount Paid</u>	<u>Account Number</u>	<u>Account Description</u>	<u>Amount</u>	
JC05709	09/24/2024	First Aid Kit Refills	\$25.24	\$25.24	60-60-00-5330	Water Treatment Plant R&M		\$25.24
						<i>Totals:</i>		\$25.24
JC05786	10/02/2024	AED Replacement Pad:	\$95.52	\$95.52	60-60-00-5223	Operating Supplies		\$95.52
						<i>Totals:</i>		\$95.52
TW Summit Corporation	Computer Check 28873	10/02/2024	10/02/2024 Posted	\$915.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$915.00	\$915.00 \$0.00
<u>Invoice #</u>	<u>Invoice Date</u>	<u>Description</u>	<u>Invoice Amount</u>	<u>Amount Paid</u>	<u>Account Number</u>	<u>Account Description</u>	<u>Amount</u>	
32391	09/25/2024	Water Quality Flushing	\$915.00	\$915.00	60-60-00-5360	Water Distribution R&M		\$915.00
						<i>Totals:</i>		\$915.00
Utility Notification Ctr CO	Computer Check 28874	10/02/2024	10/02/2024 Posted	\$179.31	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$179.31	\$179.31 \$0.00
<u>Invoice #</u>	<u>Invoice Date</u>	<u>Description</u>	<u>Invoice Amount</u>	<u>Amount Paid</u>	<u>Account Number</u>	<u>Account Description</u>	<u>Amount</u>	
224090386	09/30/2024	Locate Service-Septem	\$179.31	\$179.31	60-60-00-5361	Underground Utility Locates		\$116.55
224090386	09/30/2024	Locate Service-Septem	\$179.31	\$179.31	60-61-00-5361	Underground Utility Locates		\$62.76
						<i>Totals:</i>		\$179.31
Brian & Sandra Beatty	One-Time Check 28875	10/02/2024	10/02/2024 Posted	\$56.82	60-00-00-1127 60-60-00-4409	Citywide Bank Refunds	\$0.00 \$56.82	\$56.82 \$0.00
<u>Invoice #</u>	<u>Invoice Date</u>	<u>Description</u>	<u>Invoice Amount</u>	<u>Amount Paid</u>	<u>Account Number</u>	<u>Account Description</u>	<u>Amount</u>	
	10/02/2024		\$0.00	\$0.00	60-60-00-4409	Refunds		\$56.82
						<i>Totals:</i>		\$56.82
Karl & Casey Faessler	One-Time Check 28876	10/02/2024	10/02/2024 Posted	\$329.63	60-00-00-1127 60-60-00-4409	Citywide Bank Refunds	\$0.00 \$329.63	\$329.63 \$0.00
<u>Invoice #</u>	<u>Invoice Date</u>	<u>Description</u>	<u>Invoice Amount</u>	<u>Amount Paid</u>	<u>Account Number</u>	<u>Account Description</u>	<u>Amount</u>	
	10/02/2024		\$0.00	\$0.00	60-60-00-4409	Refunds		\$329.63
						<i>Totals:</i>		\$329.63
FIRSTBANK	Computer Check 28877	10/09/2024	10/09/2024 Posted	\$361.72	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$361.72	\$361.72 \$0.00
<u>Invoice #</u>	<u>Invoice Date</u>	<u>Description</u>	<u>Invoice Amount</u>	<u>Amount Paid</u>	<u>Account Number</u>	<u>Account Description</u>	<u>Amount</u>	
4449	09/18/2024	Credit Card	\$361.72	\$361.72	60-60-00-5223	Operating Supplies		\$235.12
4449	09/18/2024	Credit Card	\$361.72	\$361.72	60-61-00-5223	Operating Supplies		\$126.60
						<i>Totals:</i>		\$361.72
360 Underground Ltd	Computer Check 28878	10/17/2024	10/17/2024 Posted	\$3,435.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$3,435.00	\$3,435.00 \$0.00

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
24155	10/09/2024	Locate Service-Septem	\$3,435.00	\$3,435.00	60-60-00-5361	Underground Utility Locates		\$2,232.75
24155	10/09/2024	Locate Service-Septem	\$3,435.00	\$3,435.00	60-61-00-5361	Underground Utility Locates		\$1,202.25
						<i>Totals:</i>		\$3,435.00
Backflow Secure; Management	Computer Check 28879	10/17/2024	10/17/2024 Posted	\$9,000.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$9,000.00	\$9,000.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
820	10/01/2024	Backflow Services Prog	\$9,000.00	\$9,000.00	60-60-00-5417	Professional Svcs - Backflow Proc		\$9,000.00
						<i>Totals:</i>		\$9,000.00
Centennial Water & Sanitation	Computer Check 28880	10/17/2024	10/17/2024 Posted	\$1,556.61	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$1,556.61	\$1,556.61 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
1111780423	09/30/2024	Centennial Water Deliv	\$1,556.61	\$1,556.61	60-60-00-5374	Centennial Delivery Charges		\$1,556.61
						<i>Totals:</i>		\$1,556.61
CGRS Inc	Computer Check 28881	10/17/2024	10/17/2024 Posted	\$65,008.50	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$65,008.50	\$65,008.50 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
Pay App #1	08/13/2024	LAS Improvements Pro	\$65,008.50	\$65,008.50	60-60-00-7769	WTP Liquid Ammonia Sulfate		\$65,008.50
						<i>Totals:</i>		\$65,008.50
Comcast Business	Computer Check 28882	10/17/2024	10/17/2024 Posted	\$783.10	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$783.10	\$783.10 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
219924114	10/01/2024	Ethernet Internet-7404	\$783.10	\$783.10	60-60-00-5201	Telephone/Alarms		\$509.02
219924114	10/01/2024	Ethernet Internet-7404	\$783.10	\$783.10	60-61-00-5201	Telephone/Alarms		\$274.08
						<i>Totals:</i>		\$783.10
Community Resource Services	Computer Check 28883	10/17/2024	10/17/2024 Posted	\$32,921.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$32,921.00	\$32,921.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
	09/30/2024	Finance & Billing Serv	\$32,921.00	\$32,921.00	60-60-00-5145	Accounting and Payroll		\$21,398.65
	09/30/2024	Finance & Billing Serv	\$32,921.00	\$32,921.00	60-61-00-5145	Accounting and Payroll		\$11,522.35
						<i>Totals:</i>		\$32,921.00
CORE Electric Coop	Computer Check 28884	10/17/2024	10/17/2024 Posted	\$146,453.69	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$146,453.69	\$146,453.69 \$0.00

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Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
23793000	10/02/2024	Electrical Service-Septe	\$146,453.69	\$146,453.69	60-60-00-5202	Electricity & Natural Gas		\$270.48
23793000	10/02/2024	Electrical Service-Septe	\$146,453.69	\$146,453.69	60-60-00-5206	Electricity for Well Pumping		\$122,462.32
23793000	10/02/2024	Electrical Service-Septe	\$146,453.69	\$146,453.69	60-60-00-5207	Electricity for WTP		\$14,596.67
23793000	10/02/2024	Electrical Service-Septe	\$146,453.69	\$146,453.69	60-60-00-5208	Electricity for Booster Pump Stati		\$2,324.84
23793000	10/02/2024	Electrical Service-Septe	\$146,453.69	\$146,453.69	60-60-00-5330	Water Treatment Plant R&M		\$105.85
23793000	10/02/2024	Electrical Service-Septe	\$146,453.69	\$146,453.69	60-61-00-5202	Electricity & Natural Gas		\$145.65
23793000	10/02/2024	Electrical Service-Septe	\$146,453.69	\$146,453.69	60-61-00-5209	Electricity for Wastewater Pumpir		\$6,547.88
						<i>Totals:</i>		\$146,453.69
Diaz Construction Group LLC	Computer Check 28885	10/17/2024	10/17/2024 Posted	\$303,298.50	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$303,298.50	\$303,298.50 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
Pay App 2	10/07/2024	Yorkshire Water Line R	\$261,345.00	\$261,345.00	60-60-00-7768	Yorkshire Water Line Replacemer		\$261,345.00
						<i>Totals:</i>		\$261,345.00
Pay App 3- Final	10/07/2024	Yorkshire Water Line R	\$41,953.50	\$41,953.50	60-60-00-7768	Yorkshire Water Line Replacemer		\$41,953.50
						<i>Totals:</i>		\$41,953.50
DTC Print Brokers	Computer Check 28886	10/17/2024	10/17/2024 Posted	\$795.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$795.00	\$795.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
2361	10/11/2024	Bill Inserts- 9/30/24 bil	\$795.00	\$795.00	60-60-00-5169	Communications - Public Outrea		\$516.75
2361	10/11/2024	Bill Inserts- 9/30/24 bil	\$795.00	\$795.00	60-61-00-5169	Communications - Public Outrea		\$278.25
						<i>Totals:</i>		\$795.00
ENLIVE tv Services LLC	Computer Check 28887	10/17/2024	10/17/2024 Posted	\$200.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$200.00	\$200.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
0159	10/03/2024	CDN- Board Meetings-	\$200.00	\$200.00	60-60-00-5169	Communications - Public Outrea		\$130.00
0159	10/03/2024	CDN- Board Meetings-	\$200.00	\$200.00	60-61-00-5169	Communications - Public Outrea		\$70.00
						<i>Totals:</i>		\$200.00
EPR	Computer Check 28888	10/17/2024	10/17/2024 Posted	\$2,304.50	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$2,304.50	\$2,304.50 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
3872	10/08/2024	904 Green Ridge Ln &	\$1,342.50	\$1,342.50	60-60-00-5360	Water Distribution R&M		\$1,342.50
						<i>Totals:</i>		\$1,342.50
3873	10/16/2024	8408 Brambleridge Dr-	\$962.00	\$962.00	60-60-00-5360	Water Distribution R&M		\$962.00
						<i>Totals:</i>		\$962.00

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Family Support Registry	Computer Check 28889	10/17/2024	10/17/2024 Posted	\$286.50	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$286.50	\$286.50 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
	10/15/2024	Wage Garnishment-FSI	\$286.50	\$286.50	60-00-00-2110	Misc Accounts Payable		\$286.50
<i>Totals:</i>								\$286.50
Hamre Rodriguez Ostrander	Computer Check 28890	10/17/2024	10/17/2024 Posted	\$203.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$203.00	\$203.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
213	09/30/2024	Legal Service- Water R	\$203.00	\$203.00	60-60-00-5400	Professional Svcs - Water Rights		\$203.00
<i>Totals:</i>								\$203.00
JAN PRO Cleaning Systems of C	Computer Check 28891	10/17/2024	10/17/2024 Posted	\$788.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$788.00	\$788.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
291721	10/01/2024	Janitorial Service-CC-C	\$788.00	\$788.00	60-60-00-5229	Building Cleaning Expenses		\$512.20
291721	10/01/2024	Janitorial Service-CC-C	\$788.00	\$788.00	60-61-00-5229	Building Cleaning Expenses		\$275.80
<i>Totals:</i>								\$788.00
Kennedy Jenks Consultants Inc	Computer Check 28892	10/17/2024	10/17/2024 Posted	\$116,096.69	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$116,096.69	\$116,096.69 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
175229	10/16/2024	Lagae PA-7	\$730.54	\$730.54	60-60-00-5165	Engineering Services Reimbursab		\$730.54
<i>Totals:</i>								\$730.54
175236	10/16/2024	2024 General Engineer	\$9,717.93	\$9,717.93	60-60-00-5175	Engineering		\$4,966.54
175236	10/16/2024	2024 General Engineer	\$9,717.93	\$9,717.93	60-61-00-5164	Engineering Services		\$4,751.39
<i>Totals:</i>								\$9,717.93
175237	10/16/2024	Monarch Water Line Re	\$16,111.99	\$16,111.99	60-60-00-7767	Monarch Waterline Replacement		\$16,111.99
<i>Totals:</i>								\$16,111.99
175238	10/16/2024	Lead & Copper Rule Re	\$2,232.27	\$2,232.27	60-60-00-5175	Engineering		\$2,232.27
<i>Totals:</i>								\$2,232.27
175230	10/16/2024	Lift Stations Permitting	\$37,920.02	\$37,920.02	60-61-00-7766	Waste Water - Lift Station Renov		\$37,920.02
<i>Totals:</i>								\$37,920.02
175231	10/16/2024	Liquid Ammonia Sulfat	\$22,390.60	\$22,390.60	60-60-00-7754	Backwash Reclaim Tank Upgrade		\$22,390.60
<i>Totals:</i>								\$22,390.60
175232	10/16/2024	Well Vaults Rehabilitati	\$5,136.92	\$5,136.92	60-60-00-7760	Well Control Vault Rehab Progra		\$5,136.92
<i>Totals:</i>								\$5,136.92
175233	10/16/2024	Facility Documentation	\$12,817.84	\$12,817.84	60-60-00-7755	WTP Site Plan / O&M Manual De		\$12,817.84
<i>Totals:</i>								\$12,817.84

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
175234	10/16/2024	Monarch Water Line Re	\$3,601.47	\$3,601.47	60-60-00-7767	Monarch Waterline Replacement		\$3,601.47
						<i>Totals:</i>		\$3,601.47
175235	10/16/2024	Filter Beds Upgrade-Pil	\$5,437.11	\$5,437.11	60-60-00-7756	WTP Filter Rehabilitation Program		\$5,437.11
						<i>Totals:</i>		\$5,437.11
Letters Plus	Computer Check 28893	10/17/2024	10/17/2024 Posted	\$6,000.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$6,000.00	\$6,000.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
	10/12/2024	Mailing & Postage Fun	\$6,000.00	\$6,000.00	60-60-00-5221	Postage & Freight		\$3,120.00
	10/12/2024	Mailing & Postage Fun	\$6,000.00	\$6,000.00	60-60-00-5222	Printing & Copying		\$780.00
	10/12/2024	Mailing & Postage Fun	\$6,000.00	\$6,000.00	60-61-00-5221	Postage & Freight		\$1,680.00
	10/12/2024	Mailing & Postage Fun	\$6,000.00	\$6,000.00	60-61-00-5222	Printing & Copying		\$420.00
						<i>Totals:</i>		\$6,000.00
Level Engineering and Inspecti	Computer Check 28894	10/17/2024	10/17/2024 Posted	\$13,586.25	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$13,586.25	\$13,586.25 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
2024-9	10/04/2024	Contract 17571-Gen Co	\$13,586.25	\$13,586.25	60-60-00-5164	Engineering Services		\$1,119.63
2024-9	10/04/2024	Contract 17571-Gen Co	\$13,586.25	\$13,586.25	60-60-00-5999	Parks, Trails and Open Space - IG		\$7,345.00
2024-9	10/04/2024	Contract 17571-Gen Co	\$13,586.25	\$13,586.25	60-61-00-5164	Engineering Services		\$602.87
2024-9	10/04/2024	Contract 17571-Gen Co	\$13,586.25	\$13,586.25	60-61-00-5400	Collection - Emergency Response		\$563.75
2024-9	10/04/2024	Contract 17571-Gen Co	\$13,586.25	\$13,586.25	60-61-00-5999	Parks, Trails and Open Space - IG		\$3,955.00
						<i>Totals:</i>		\$13,586.25
Pathian Administrators	Computer Check 28895	10/17/2024	10/17/2024 Posted	\$77.98	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$77.98	\$77.98 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
207203	10/09/2024	Vision Insurance-Nov	\$77.98	\$77.98	60-60-00-5124	Employer Contr. Health Insurance		\$50.69
207203	10/09/2024	Vision Insurance-Nov	\$77.98	\$77.98	60-61-00-5124	Employer Contr. Health Insurance		\$27.29
						<i>Totals:</i>		\$77.98
Pitney Bowes Inc.	Computer Check 28896	10/17/2024	10/17/2024 Posted	\$91.29	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$91.29	\$91.29 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
1026175364	10/01/2024	Postage Machine Ink C	\$91.29	\$91.29	60-60-00-5221	Postage & Freight		\$59.34
1026175364	10/01/2024	Postage Machine Ink C	\$91.29	\$91.29	60-61-00-5221	Postage & Freight		\$31.95
						<i>Totals:</i>		\$91.29
Plum Creek Water Reclamation	Computer Check	10/17/2024	10/17/2024	\$68,034.28	60-00-00-1127	Citywide Bank	\$0.00	\$68,034.28

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
	28897		Posted		60-00-00-2100	Accounts Payable Co	\$68,034.28	\$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
CPNMD0924	10/01/2024	Wastewater Treatment	\$60,695.70	\$60,695.70	60-61-00-5167	PCWRA Sewer Fees		\$60,695.70
						<i>Totals:</i>		\$60,695.70
RCPN0924	10/01/2024	Pond 16-September	\$7,338.58	\$7,338.58	60-60-00-5205	Reuse Pumping		\$7,338.58
						<i>Totals:</i>		\$7,338.58
Power Systems West Colorado	Computer Check 28898	10/17/2024	10/17/2024 Posted	\$10,207.02	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$10,207.02	\$10,207.02 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
SI2466003461	10/08/2024	LS1- Inspection	\$495.20	\$495.20	60-61-00-5340	Lift Station - Repairs and Mainte		\$495.20
						<i>Totals:</i>		\$495.20
SI2466003462	10/08/2024	Generator Inspection	\$1,293.45	\$1,293.45	60-61-00-5340	Lift Station - Repairs and Mainte		\$1,293.45
						<i>Totals:</i>		\$1,293.45
SI2466003463	10/08/2024	Generator Service & Ft	\$228.39	\$228.39	60-61-00-5340	Lift Station - Repairs and Mainte		\$228.39
						<i>Totals:</i>		\$228.39
SI2466003465	10/08/2024	LS1- Generator Inspect	\$495.20	\$495.20	60-61-00-5340	Lift Station - Repairs and Mainte		\$495.20
						<i>Totals:</i>		\$495.20
SI2466003486	10/09/2024	LS3-Generator Service	\$1,790.14	\$1,790.14	60-61-00-5340	Lift Station - Repairs and Mainte		\$1,790.14
						<i>Totals:</i>		\$1,790.14
SI2466003501	10/10/2024	LS6-Generator Inspecti	\$495.20	\$495.20	60-61-00-5340	Lift Station - Repairs and Mainte		\$495.20
						<i>Totals:</i>		\$495.20
SI2466003504	10/10/2024	LS7-Generator Inspecti	\$495.20	\$495.20	60-61-00-5340	Lift Station - Repairs and Mainte		\$495.20
						<i>Totals:</i>		\$495.20
SI2466003531	10/14/2024	Generator Inspection	\$1,832.14	\$1,832.14	60-61-00-5340	Lift Station - Repairs and Mainte		\$1,832.14
						<i>Totals:</i>		\$1,832.14
SI2466003538	10/14/2024	Generator Inspection	\$1,293.45	\$1,293.45	60-61-00-5340	Lift Station - Repairs and Mainte		\$1,293.45
						<i>Totals:</i>		\$1,293.45
SI2466003539	10/14/2024	LS2-Generator Inspecti	\$1,293.45	\$1,293.45	60-61-00-5340	Lift Station - Repairs and Mainte		\$1,293.45
						<i>Totals:</i>		\$1,293.45
SI2466003541	10/14/2024	LS7- Generator Inspect	\$495.20	\$495.20	60-61-00-5340	Lift Station - Repairs and Mainte		\$495.20
						<i>Totals:</i>		\$495.20
RubinBrown LLP	Computer Check 28899	10/17/2024	10/17/2024 Posted	\$2,200.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$2,200.00	\$2,200.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
1020992	09/30/2024	2023 Audit- Final Bill	\$2,200.00	\$2,200.00	60-60-00-5146	Audit		\$1,430.00
1020992	09/30/2024	2023 Audit- Final Bill	\$2,200.00	\$2,200.00	60-61-00-5146	Auditing		\$770.00
						<i>Totals:</i>		\$2,200.00

Castle Pines North Metro. District

Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Security Central Inc.	Computer Check 28900	10/17/2024	10/17/2024 Posted	\$258.18	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$258.18	\$258.18 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
970498	09/30/2024	Fire Alarm Monitoring-	\$132.18	\$132.18	60-60-00-5202	Electricity & Natural Gas	\$85.92	
970498	09/30/2024	Fire Alarm Monitoring-	\$132.18	\$132.18	60-61-00-5202	Electricity & Natural Gas	\$46.26	
							<i>Totals:</i>	\$132.18
970499	09/30/2024	Fire Alarm Monitoring-	\$126.00	\$126.00	60-60-00-5201	Telephone/Alarms	\$126.00	
							<i>Totals:</i>	\$126.00
Semocor Inc	Computer Check 28901	10/17/2024	10/17/2024 Posted	\$51,730.81	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$51,730.81	\$51,730.81 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
6900	10/01/2024	ORC, WTP, LSs & Field	\$51,730.81	\$51,730.81	60-60-00-5147	Operations Staffing Contract	\$22,620.00	
6900	10/01/2024	ORC, WTP, LSs & Field	\$51,730.81	\$51,730.81	60-60-00-5330	Water Treatment Plant R&M	\$9,195.63	
6900	10/01/2024	ORC, WTP, LSs & Field	\$51,730.81	\$51,730.81	60-60-00-5360	Water Distribution R&M	\$3,139.60	
6900	10/01/2024	ORC, WTP, LSs & Field	\$51,730.81	\$51,730.81	60-60-00-7769	WTP Liquid Ammonia Sulfate	\$6,095.58	
6900	10/01/2024	ORC, WTP, LSs & Field	\$51,730.81	\$51,730.81	60-61-00-5147	Operations Staffing Contract	\$10,680.00	
							<i>Totals:</i>	\$51,730.81
Seter, Vander Wall & Mielke, P.	Computer Check 28902	10/17/2024	10/17/2024 Posted	\$20,773.94	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$20,773.94	\$20,773.94 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
87465	09/30/2024	Legal Service-Septemb	\$20,773.94	\$20,773.94	60-60-00-5163	Legal Services	\$13,503.06	
87465	09/30/2024	Legal Service-Septemb	\$20,773.94	\$20,773.94	60-61-00-5163	Legal Services	\$7,270.88	
							<i>Totals:</i>	\$20,773.94
TW Summit Corporation	Computer Check 28903	10/17/2024	10/17/2024 Posted	\$8,732.58	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$8,732.58	\$8,732.58 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
32384	09/10/2024	Air Valve Repairs- Vari	\$1,871.33	\$1,871.33	60-60-00-5360	Water Distribution R&M	\$1,871.33	
							<i>Totals:</i>	\$1,871.33
32396	10/09/2024	Hydrant Painting-Prog	\$6,861.25	\$6,861.25	60-60-00-5360	Water Distribution R&M	\$6,861.25	
							<i>Totals:</i>	\$6,861.25
Schmidt Construction CO.	Computer Check 28904	10/17/2024	10/17/2024 Posted	\$3,500.00	60-00-00-1127 60-00-00-2100	Citywide Bank Accounts Payable Co	\$0.00 \$3,500.00	\$3,500.00 \$0.00
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description	Amount	
	10/08/2024	Hydrant Meter-Deposi	\$3,500.00	\$3,500.00	60-60-00-4250	Misc. Income	\$3,500.00	

Castle Pines North Metro. District Cash Disbursement Journals

Payee	Trans. Type Trans. No.	Trans. Date	Post Date Post Status	Amount	Account Number	Description	Debit Amount	Credit Amount
Invoice #	Invoice Date	Description	Invoice Amount	Amount Paid	Account Number	Account Description		Amount
							<i>Totals:</i>	\$3,500.00
Grand Totals:				\$3,538,143.05			\$3,538,143.05	\$3,538,143.05
A total of 77 payment(s) listed								

Castle Pines North Metro. District

Cash Disbursement Journals

Account Summary

Account Number	Description	Debit Amount	Credit Amount
60-00-00-1127	Citywide Bank	\$0.00	\$3,538,143.05
60-00-00-2100	Accounts Payable Control	\$3,537,756.60	\$3,537,756.60
60-00-00-2110	Misc Accounts Payable	\$859.50	\$0.00
60-60-00-4250	Misc. Income	\$3,500.00	\$0.00
60-60-00-4409	Refunds	\$386.45	\$0.00
60-60-00-5124	Employer Contr. Health Insurance	\$315.53	\$0.00
60-60-00-5145	Accounting and Payroll	\$46,445.43	\$0.00
60-60-00-5146	Audit	\$1,430.00	\$0.00
60-60-00-5147	Operations Staffing Contract	\$22,620.00	\$0.00
60-60-00-5163	Legal Services	\$27,280.38	\$0.00
60-60-00-5164	Engineering Services	\$2,639.01	\$0.00
60-60-00-5165	Engineering Services Reimbursable	\$1,822.08	\$0.00
60-60-00-5166	Software Support	\$1,219.96	\$0.00
60-60-00-5167	Professional Services - Water Rights	\$5,599.50	\$0.00
60-60-00-5169	Communications - Public Outreach	\$10,474.75	\$0.00
60-60-00-5175	Engineering	\$12,058.12	\$0.00
60-60-00-5201	Telephone/Alarms	\$1,822.70	\$0.00
60-60-00-5202	Electricity & Natural Gas	\$658.01	\$0.00
60-60-00-5204	Trash Removal	\$218.69	\$0.00
60-60-00-5205	Reuse Pumping	\$13,338.81	\$0.00
60-60-00-5206	Electricity for Well Pumping	\$204,804.81	\$0.00
60-60-00-5207	Electricity for WTP	\$27,543.85	\$0.00
60-60-00-5208	Electricity for Booster Pump Station	\$4,376.90	\$0.00
60-60-00-5221	Postage & Freight	\$3,648.04	\$0.00
60-60-00-5222	Printing & Copying	\$1,168.80	\$0.00
60-60-00-5223	Operating Supplies	\$481.98	\$0.00
60-60-00-5229	Building Cleaning Expenses	\$512.20	\$0.00
60-60-00-5310	Building Repair & Maint	\$2,086.50	\$0.00
60-60-00-5316	Ditch/Land Rights Operating Expenses	\$1,444.49	\$0.00
60-60-00-5320	Wells R&M	\$177,087.50	\$0.00
60-60-00-5330	Water Treatment Plant R&M	\$12,189.27	\$0.00
60-60-00-5360	Water Distribution R&M	\$52,883.84	\$0.00
60-60-00-5361	Underground Utility Locates	\$4,920.05	\$0.00
60-60-00-5374	Centennial Delivery Charges	\$1,608.11	\$0.00
60-60-00-5400	Professional Svcs - Water Rights Hamre,	\$677.00	\$0.00
60-60-00-5417	Professional Svcs - Backflow Program	\$18,000.00	\$0.00
60-60-00-5419	Professional Svcs- Rates and Fees Study	\$1,423.50	\$0.00
60-60-00-5999	Parks, Trails and Open Space - IGA experi	\$42,990.19	\$0.00
60-60-00-7754	Backwash Reclaim Tank Upgrade	\$30,122.05	\$0.00

Castle Pines North Metro. District

Cash Disbursement Journals

60-60-00-7755	WTP Site Plan / O&M Manual Developm	\$26,806.65	\$0.00
60-60-00-7756	WTP Filter Rehabilitation Program	\$7,414.45	\$0.00
60-60-00-7760	Well Control Vault Rehab Program	\$7,179.61	\$0.00
60-60-00-7767	Monarch Waterline Replacement Project	\$1,997,265.00	\$0.00
60-60-00-7768	Yorkshire Water Line Replacement Proje	\$304,917.42	\$0.00
60-60-00-7769	WTP Liquid Ammonia Sulfate	\$71,104.08	\$0.00
60-61-00-5124	Employer Contr. Health Insurance	\$169.89	\$0.00
60-61-00-5145	Accounting and Payroll	\$25,009.07	\$0.00
60-61-00-5146	Auditing	\$770.00	\$0.00
60-61-00-5147	Operations Staffing Contract	\$10,680.00	\$0.00
60-61-00-5163	Legal Services	\$14,689.43	\$0.00
60-61-00-5164	Engineering Services	\$6,614.66	\$0.00
60-61-00-5166	Software Support	\$656.90	\$0.00
60-61-00-5167	PCWRA Sewer Fees	\$121,391.40	\$0.00
60-61-00-5169	Communications - Public Outreach	\$5,640.25	\$0.00
60-61-00-5201	Telephone/Alarms	\$546.27	\$0.00
60-61-00-5202	Electricity & Natural Gas	\$354.31	\$0.00
60-61-00-5204	Trash Removal	\$117.76	\$0.00
60-61-00-5209	Electricity for Wastewater Pumping	\$12,819.15	\$0.00
60-61-00-5221	Postage & Freight	\$1,964.32	\$0.00
60-61-00-5222	Printing & Copying	\$629.35	\$0.00
60-61-00-5223	Operating Supplies	\$208.08	\$0.00
60-61-00-5229	Building Cleaning Expenses	\$275.80	\$0.00
60-61-00-5310	Building Repair & Maint	\$1,123.50	\$0.00
60-61-00-5340	Lift Station - Repairs and Maintenance	\$10,207.02	\$0.00
60-61-00-5361	Underground Utility Locates	\$2,649.26	\$0.00
60-61-00-5370	Collection - Repair and Maintenance	\$78,923.69	\$0.00
60-61-00-5400	Collection - Emergency Response	\$563.75	\$0.00
60-61-00-5410	Collection - Chemical Treatment	\$563.75	\$0.00
60-61-00-5419	Professional Svcs- Rates and Fees Study	\$766.50	\$0.00
60-61-00-5999	Parks, Trails and Open Space - IGA experi	\$23,148.56	\$0.00
60-61-00-7766	Waste Water - Lift Station Renovations	\$62,315.17	\$0.00

Accounts Receivable Summary

From 09/01/2024 Through 09/30/2024

OPEN BALANCE					<u>Balance</u>
	1,048,507.46				1,048,507.46
MONTHLY-Adjustment	<u>Amount</u>		<u>Usage</u>	<u>Count</u>	
WATER	-34,937.56		0.00	20	1,013,569.90
SEWER	-16.13		0.00	4	1,013,553.77
DRAINAGE	-0.65		0.00	1	1,013,553.12
CAP MAINT WT	-74.13		0.00	5	1,013,478.99
CUST CHG WTR	-45.25		0.00	6	1,013,433.74
CUST CHG SWR	-56.09		0.00	6	1,013,377.65
WAT.Penalty	-25.00		0.00	1	1,013,352.65
SEW.Penalty	-150.00		0.00	2	1,013,202.65
***Total Adjustment	<u>-35,304.81</u>		<u>0.00</u>	<u>45</u>	
MONTHLY-Charge	<u>Minimum</u>	<u>Overage</u>	<u>Usage</u>	<u>Count</u>	<u>Total</u>
WATER	0.00	554,118.03	93,912,000.00	4,056	554,118.03
SEWER	0.00	131,570.01	18,782,471.00	3,956	131,570.01
CAP MAINT WT	150,954.77	0.00	0.00	4,054	150,954.77
CUST CHG WTR	48,041.66	0.00	0.00	4,054	48,041.66
CUST CHG SWR	56,791.30	0.00	0.00	3,955	56,791.30
***Total Charge	<u>255,787.73</u>	<u>685,688.04</u>	<u>112,694,471.00</u>	<u>20,075</u>	<u>941,475.77</u>
MONTHLY-Penalty	<u>Amount</u>			<u>Count</u>	
WATER	2,200.00			88	1,956,878.42
SEWER	125.00			92	1,957,003.42
CAP MAINT WT	0.00			93	1,957,003.42
CUST CHG WTR	0.00			93	1,957,003.42
CUST CHG SWR	0.00			92	1,957,003.42
***Total Penalty	<u>2,325.00</u>			<u>458</u>	
MONTHLY-Miscellaneous	<u>Amount</u>			<u>Count</u>	
WATER Miscellaneous	48.00			4	1,957,051.42
***Total Miscellaneous	<u>48.00</u>			<u>4</u>	

<u>MONTHLY-Payment</u>	<u>Amount</u>	<u>Count</u>	<u>Balance</u>
WATER	-531,444.76	3,872	1,425,606.66
WATER Miscellaneous	-48.00		1,425,558.66
SEWER	-136,421.47	3,639	1,289,137.19
CAP MAINT WT	-149,479.09	3,731	1,139,658.10
CUST CHG WTR	-48,011.68	3,718	1,091,646.42
CUST CHG SWR	-56,831.22	3,622	1,034,815.20
WAT.Penalty	-1,969.80		1,032,845.40
***Total Payments	<u>-924,206.02</u>	<u>18,582</u>	

<u>MONTHLY-Return Check</u>	<u>Amount</u>	<u>Count</u>	
WATER	735.52	4	1,033,580.92
WATER Miscellaneous	12.00		1,033,592.92
SEWER	186.84	4	1,033,779.76
CAP MAINT WT	186.30	4	1,033,966.06
CUST CHG WTR	58.75	4	1,034,024.81
CUST CHG SWR	71.25	4	1,034,096.06
***Total Return Check	<u>1,250.66</u>	<u>20</u>	

<u>MONTHLY-Refund</u>	<u>Amount</u>	<u>Count</u>	
WATER	129.81	1	1,034,225.87
***Total Refund	<u>129.81</u>	<u>1</u>	

Closing Balance 1,034,225.87

CASTLE PINES NORTH METROPOLITAN DISTRICT
 PAYMENTS DUE TO CITY OF CASTLE PINES PER 2023 IGA
 12/31/2023

From 2023 audit pages 42 & 43 - Note 10

	STORM DRAINAGE
Beginning fund balance 1/1/23	\$ 1,351,159
Revenues	51,280
Expenditures	(2,099)
Transfer to City of Castle Pines - April 2023	(1,375,963)
BALANCE DUE 12/31/23	(24,377)
Ending fund balance 12/31/23	\$ -
BALANCE DUE 12/31/23	\$ 24,377
BALANCE DUE OCTOBER 2024	\$ 24,377
TOTAL CONVEYANCE TO CITY	\$ 1,400,340

amount agrees to statement of net position 2023 audit

	General Fund	Conservation Trust	Total
Beginning fund balance 1/1/23	\$ 7,849,490	\$ 419,370	\$ 8,268,860
Revenues	3,744,040	80,662	3,824,702
Expenditures			-
General government	(388,304)	-	(388,304)
Parks and open space	(262,742)	-	(262,742)
Capital outlay	(458,611)	-	(458,611)
Transfer to other funds	(650,000)	-	(650,000)
2023 transfer to City of Castle Pines	(8,404,932)	(500,032)	(8,904,964)
BALANCE DUE 12/31/23	(1,428,941)	-	(1,428,941)
Ending fund balance 12/31/23	\$ -	\$ -	\$ -

amount agrees to balance sheet 2023 audit

BALANCE DUE 12/31/23	\$ 1,428,941
PAYMENT FEBRUARY 2024	(47,536)
BALANCE DUE OCTOBER 2024	\$ 1,381,405

CONVEYANCE TO THE CITY	
Park improvements	\$ 3,606,890
Conservation trust funds	500,033
General funds	7,162,483
TOTAL CONVEYANCE	\$ 11,269,406
Paid to City 2023	\$ 8,904,964
Net book value of assets	935,501
Amount due as of 12/31/23	1,428,941
TOTAL CONVEYANCE	\$ 11,269,406

10. IGAs With The City

IGA Regarding Transfer Of Stormwater System And Necessary Property Rights

The District and the City entered into an IGA regarding the transfer of the District's stormwater system to the City (Stormwater IGA), effective January 25, 2023, which includes stormwater infrastructure and associated improvements, equipment and real property interests that are necessary and sufficient in order to maintain and operate the stormwater system of the District.

The Stormwater IGA also provides that the District transfer all available funds in the Storm Drainage Fund to the City to ensure the City has adequate funds to defray costs associated with the ownership and ongoing operation and maintenance of the stormwater system. During 2023, the District recorded the conveyance of assets to the City in the amount of \$1,400,340 as required by the Stormwater IGA. There were remaining funds due to the City of \$24,377 which is included in due to other government in the statement of net position as of December 31, 2023.

IGA Between The City And District Regarding Operation, Maintenance And Transfer Of Recreation Properties

The District and the City entered into an IGA regarding the transfer of the District's parks, recreation, trails and open space assets (Parks and Recreation IGA), effective March 31, 2023, in order to provide for the transfer of the responsibility for the ownership, operation and maintenance of the parks, recreation, trails and open space assets from the District to the City.

In accordance with the Parks and Recreation IGA, the District is to convey to the City all real property, buildings, fixtures, easements for parks and trails infrastructure and interests therein related to the recreation properties that are owned by the District. The District expects the conveyance of all such real property interests, facilities and fixtures to be completed in 2024.

The Parks and Recreation IGA also provides that the District transfer all 2023 available parks and recreation funds to the City to be used for the operation and maintenance of all parks and recreation properties for the benefit of the District taxpayers, the community of Castle Pines and for all persons using such properties.

Per the Parks and Recreation IGA, during 2023 the District transferred amounts for park improvements, conservation trust funds and general funds attributable to the District's operations mill levy and miscellaneous revenues (less \$650,000 to be used for 2023 water and wastewater expenditures). The total conveyance of assets to the City recorded by the District during 2023 of \$11,269,406 is comprised of amounts related to park improvements, conservation trust funds and general funds of \$3,606,890, \$500,033 and \$7,162,483, respectively. Of the \$11,269,406, \$8,904,964 was paid in cash to the City, while \$935,501 of net book value of assets. In addition, there are remaining general and conservation trust funds of \$1,428,941 due to the City related to the Parks and Recreation IGA which is included in due to other government in the balance sheet and statement of net position as of December 31, 2023.

MEMORANDUM

TO: Castle Pines North Metropolitan District

FROM: Seter, Vander Wall & Mielke, P.C., Kim J. Seter, Esq. and Paul Polito, Esq.

DATE: October 22, 2024

RE: Legal Status Report for the October 28, 2024 Board Meeting

ACTION ITEMS

MATTER: DRAFT SEPTEMBER 23 REGULAR MEETING MINUTES

Status: The draft minutes are attached.

Action: Consider approval.

MATTER: SUMMARY OF PARKER WATER INCLUSION TERMINATION

Status: The Board requested a summary of the reasons Parker Water and Sanitation District for termination of the Inclusion Agreement with CPNMD, as stated in Parker Water's February 10, 2022 letter to the District.

Parker Water expressed concern about CPNMD's system and operations during the post-election due diligence period and terminated the IGA when these concerns could not be adequately addresses in its opinion. The concerns were:

- Unreported environmental violations, including raw sewage discharges into local drainage ways;
- Wells in disrepair and incapable of delivering water necessary to meet anticipated 2022 summer demands;
- A nonfunctional water treatment plant that may not have been functional by the time water deliveries by Centennial were to cease in April 2022;
- CPNMD facilities were located on private property without documentation of necessary property rights; and,
- Groundwater rights used by CPNMD without adequate evidence of CPNMD ownership. See item concerning CPMD IGA above.

{00762133 2}

Parker Water estimated that addressing the items listed above would cost at least \$26 million; substantially more than had been set aside in the Inclusion Agreement for this purpose.

Additionally, Parker Water was concerned that:

- CPNMD was unable to pay the \$34.8 million inclusion fee to Parker Water on its due date of January 3, 2022.
- In Parker Water’s opinion, CPNMD was required to give all proceeds of CPNMD’s sale of water rights to Parker Water. CPNMD’s Board disagreed.
- CPNMD was unwilling to pay Parker Water a “reasonable share” of the \$26 million required to address the issues cited during the due diligence period. It should be noted that these issues were identified and funds to resolve them were provided; however, the estimated cost of addressing them increased during the due diligence period.

Action: This information is provided for your consideration and discussion as requested.

UPDATE REPORTS ON MATTERS IN PROCESS

MATTER: REVISIT MEMORANDA OF UNDERSTANDING BETWEEN CASTLE PINES METRO DISTRICT AND CASTLE PINES NORTH METRO DISTRICT RE WATER RIGHTS

Status: We drafted a Memoranda of Understanding (MOUs) between CPNMD and CPMD regarding the joint use of shared water rights as part of the effort to include in Parker Water.. It was not executed once the Parker Water and Sanitation District inclusion was terminated. We are revisiting the MOUs to ensure clarity, proper documentation, and resolution and will restart discussions with CPMD at that time.

Action: None required.

MATTER: PARKS, OPEN SPACE AND RECREATIONAL FACILITIES IGA PROPERTY CONVEYANCES

Status: The Board approved conveyance of properties in Batch 1 and all subsequent batches. Documentation is underway.

Action: None required.

MATTER: SALE OF FARM PROPERTIES

Status: I have received a contract and offer of \$469,504.00 for “36.68 estimated mineral acres.” I am communicating with the potential buyer to determine the extent of “mineral acres.” This is a price of \$12,800.00 per acre but am not certain the buyer is offering anything for the surface rights. This offer is being revised and will increase substantially. I did not communicate with the potential buyer while on vacation but will reconnect shortly.

Action: None required.

MATTER: CONSOLIDATION/INCLUSION OF HIDDEN POINTE METRO DISTRICT

Status: Hidden Point Metropolitan District (HPMD) Board advised Nathan that it wants to move forward with an election regarding inclusion at its regular election in May, 2025. A preliminary inclusion agreement has been drafted and will be presented to the CPNMD Board after receipt of comments from HPMD’s attorney.

Action: None required.

MATTER: SERVICE PLAN AMENDMENT

Status: The intergovernmental agreements with the City require CPN to amend its service plan to eliminate the District's Park and Recreation and Stormwater services. You approved the petition at the August meeting.

We will hold this until the Property transfers are completed.

Action: None required.

UPDATE REPORTS ON MATTERS COMPLETED OR WITH NO CHANGE

MATTER: JAM RANCH INCLUSION REQUEST

Status: The property owner has requested inclusion into the District. The inclusion process is governed by the Colorado Statues. The property owner has been provided a checklist and form documents.

Action: None required at this time.

MATTER: CONSIDERATION OF REGIONAL WATER AUTHORITY TO SECURE RENEWABLE SOURCES

Status: We have provided comments on the final draft of the RFP which I believe it has been published to selected contractors. NTravis is planning an executive session for further discussion, possibly in the November meeting.

Action: None required.

MATTER: 2023 BUDGET AMENDMENT

Status: This matter has been completed and will be removed from the November Status Report.

Action: No Action Required.

MATTER: AMENDMENT TO RULES AND REGULATIONS

Status: NTravis is working on a comprehensive response plan, portions of which can be added to the Rules and Regulations. The Board passed resolutions amending the rules and regulations three times in 2020 and once in 2021. However, the rules and regulations were never revised to incorporate these changes.

The Board asked us to prepare a brief memorandum summarizing the previous changes. It was provided at the February 26, 2024 meeting.

Action: None required.

MATTER: SHARED-SPLITTER REPLACEMENT IGA

Status: Investigating status.

Action: None required.

MATTER: LIFT STATION NO. 5 EASEMENTS

Status: CPNMD needs an easement from Hidden Pointe HOA for Lift Station No. 5. Legal descriptions being sought.

Action: None required at this time.

CASTLE PINES NORTH



METROPOLITAN DISTRICT™

Memorandum

From: Nathan J. Travis

To: CPNMD Board of Directors

Date: 10/28/2024

Re: District Manager's Report

Staffing

- Following our recent work session, I plan to request three additional full-time employees for the 2025 budget year. I do not yet know what specific positions I will be requesting.

Conservation

- Holdover- We are finally seeing some traction with Slow the Flow and our other conservation programs. Yard Signs are now available for residents that are utilizing these programs.

Capital Project Updates (for additional information please refer to the engineering report)

- Monarch Waterline: Work has begun on the additional work for the added scope for the Monarch waterline replacement project. The project is currently ahead of schedule, and we are aiming to fully complete this phase prior to Thanksgiving
- Liquid Ammonia Sulfate Project: Construction is wrapping up; we are currently working through the start-up process. This project is expected to be completed in the next two weeks. This project involves the relocation of our ammonia sulfate chemical room to allow for safe delivery and storage. This will also increase the ease of maintenance on these systems. In addition, we are constructing a workshop and storage area within the treatment plant in the room that the LAS is currently housed.
- Well Valut Rehab Project: Work on this project has begun. This project will standardize equipment at all of our well-sites, replace outdated components, increase security for our well sites, and rehabilitate aging concrete in 3 of the vaults. This does NOT impact the actual wells themselves, rather the metering and control vaults downstream of the wells themselves.
- Documentation and Asset Management: Kennedy Jenks has assigned a specialized project manager to continue this work. We are in the process of identifying asset hierarchy, doing condition assessments, and preparing to integrate this work into our long-term Capital Planning. Field work has been completed, and we expect a deliverable of the draft by the end of November. We will then begin the process of integrating this hierarchy into our AIMS asset management and CIP planning system. This effort will be focused on the Water Treatment Plant, Well Sites, Booster Pump Station, and Interconnect Pump Station. We are not collecting wastewater lift station information at this time as these assets will be accounted for as part of the Lift Station Renovation Project effort.
- Filter Rehab Project: Detailed information about this project will be presented at this month's board meeting.

Finance Policy Draft

- Pending legal and finance review. I anticipate discussing the document at a future work session.

Rate Update

- I am working with Bartle Wells to include the board requested information for the Rate Update. Including an expanded list of district comparisons & showing cost per thousand gallons produced.

Denver Parks Update:

- (holdover) Denver Parks has provided, and plans have been approved by CPNMD. We do not have a timeline on the construction timeline. Tap fees have been paid for the prior installed service line, the district will seek payment for the additional fees required for the larger tap, prior to construction. A construction timeline has not yet been provided.

Emergency Notification System

- Testing the system was a success. We have utilized this capability several times already to notify customers of both planned and emergency service outages.

Castle Pines Metropolitan District Tank Project

- (holdover) Castle Pines Metro is in the design phase of constructing a new water tank near our Treatment Plant. This will require relocation of the two large diameter water mains that feed our tanks. This will be completed at no cost to our District. CPMD will work with Kennedy Jenks to approve the design changes to our existing waterlines. We will also inspect the construction of these lines; those costs will also be the responsibility of CPMD.

Upcoming Days Off (I will not be in the office)

- Currently, I have no planned time-off for the month of November.

Castle Pines North Systems Report August 2024

Presented by:

Semocor, Inc.

3995 Castlewood Canyon Rd.

Castle Rock CO, 80104

Water Treatment

#NAME?		Aug-23	Aug-24	
LDA-1	1	0.000	3.39	Normal Operation/To Irrigation
Reuse	2	7.630	6.49	Normal Operation/To Irrigation
A-1	3	5.650	10.14	Normal Operation
A-2	4	0.000	0.00	Normal Operation
A-3	4	0.000	13.76	Normal Operation
A-4	1	15.590	13.61	Normal Operation
A-5	1	12.850	12.20	Normal Operation
A-6	2	26.510	15.88	Normal Operation
DE-6	1	5.320	1.84	Normal Operation
A-7	1	26.210	16.73	Normal Operation
DE-7	2	<u>0.000</u>	<u>0.00</u>	Normal Operation

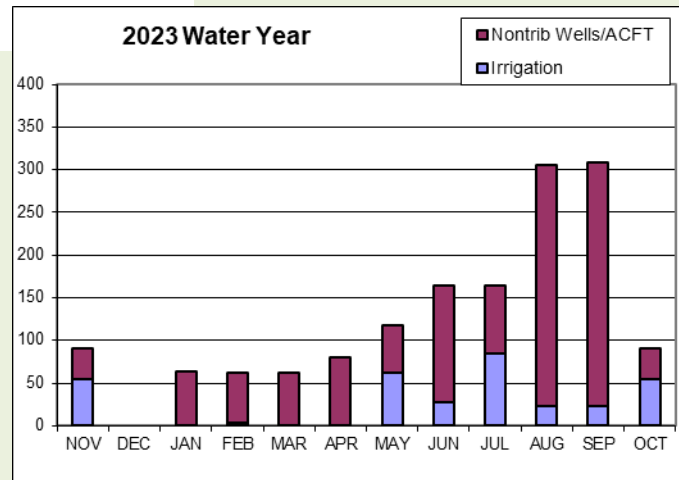
Total MG/Month **92.130** **84.158** *LDA-1 and Reuse not into plant.*

Gallons/day **2,971,935** **2,714,774**

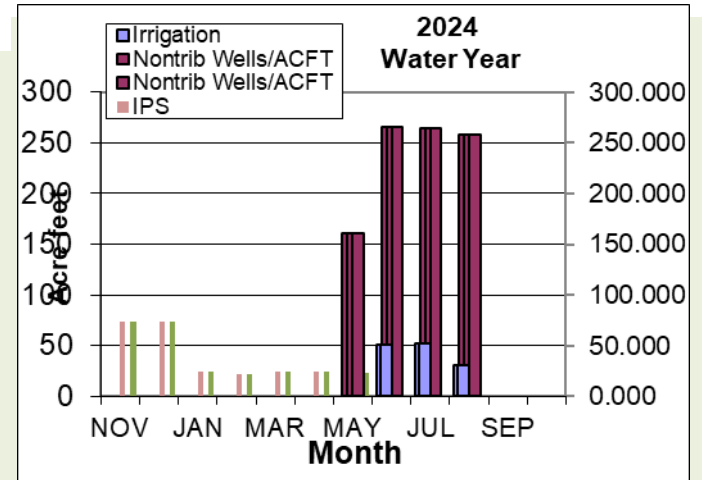
Monthly Precipitation **2.30** **0.21**

Water YTD Precipitation **20.93** **35.52**
Total MG/Water
Year **344.470** **315.460**

Water Year is from 11-1-2022 through 10-31-2024



YTD 17% Irrigation used



YTD 10% Irrigation used

Water treatment Plant – 84,158,000 gallons/month and the Daily Avg. = 54%, maximum day demand = 68% of capacity.

Distribution System- Aug. 2024

All Water Samples taken for Aug are good.

IPS Pipeline – Transferred 0 MG in August-Normal Operation

(2024 water YTD transfer is 236.638 gallons to the district.)

Water Tanks – Normal Operation

Serena Drive PRV – Normal Operation

Monarch Blvd PRV – Normal Operation

Hidden point PRV – Normal Operation

Zone 4 BPS – Normal Operation.

Meter Readings – Submitted 8-25-2024.

Fire Hydrants – Normal Operation

Water Mains –Normal Operation

Miscellaneous

Generators Water plant. Normal Operation

Work Orders – 37

Failed Inspections – 0.

Emergency call outs - 3

Non-payment shut-offs - 1.

Tag hangings – 18.

Turn off and turn on (normal work orders) – 1.

Final and meter Re-reads – 17

Curb-stop valves/meter pit repairs – 2.

Extra work- Main line work on Monarch completed at this time.

Collection System

All lift stations are undergoing Kennedy Jenks review.

Lift stations will be cleaned and checked every three months for any Maintenance items.

All Maintenance completed on lift stations.

Lift station # 1 - Normal Operation

Lift station # 2 -Normal Operation

Lift station # 3 – Normal Operation

Lift station # 4 -Normal Operation

Lift station # 5 –Normal Operation

Lift station # 6 –Normal Operation

Lift station #7 -Normal Operation

Lagae LS - Normal Operation

Castle Pines North Systems Report September 2024

Presented by:

Semocor, Inc.

3995 Castlewood Canyon Rd.

Castle Rock CO, 80104

Water Treatment

#NAME?		Sep-23	Sep-24	
LDA-1	1	7.600	3.68	Normal Operation/To Irrigation
Reuse	2	0.000	8.55	Normal Operation/To Irrigation
A-1	3	14.400	13.21	Normal Operation
A-2	4	0.000	0.00	Normal Operation
A-3	4	0.000	12.66	Normal Operation
A-4	1	17.550	12.52	Normal Operation
A-5	1	12.650	14.37	Normal Operation
A-6	2	27.840	15.94	Normal Operation
DE-6	1	0.000	1.36	Normal Operation
A-7	1	20.520	17.30	Normal Operation
DE-7	2	<u>0.000</u>	<u>0.00</u>	Normal Operation

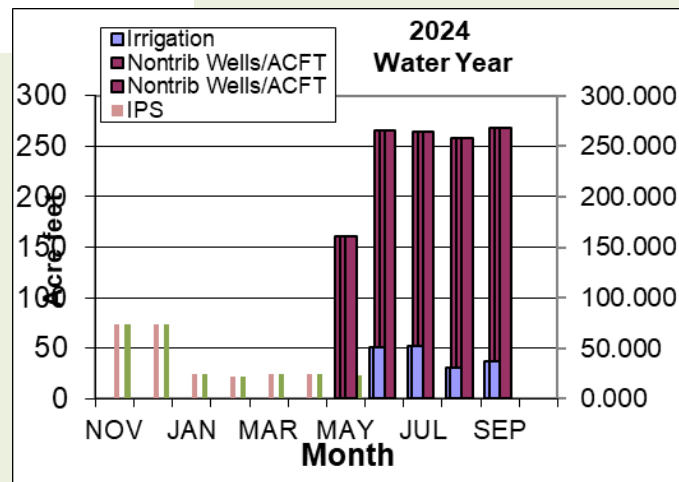
Total MG/Month **92.960** **87.354** *LDA-1 and Reuse not into plant.*

Gallons/day **3,098,667** **2,911,800**

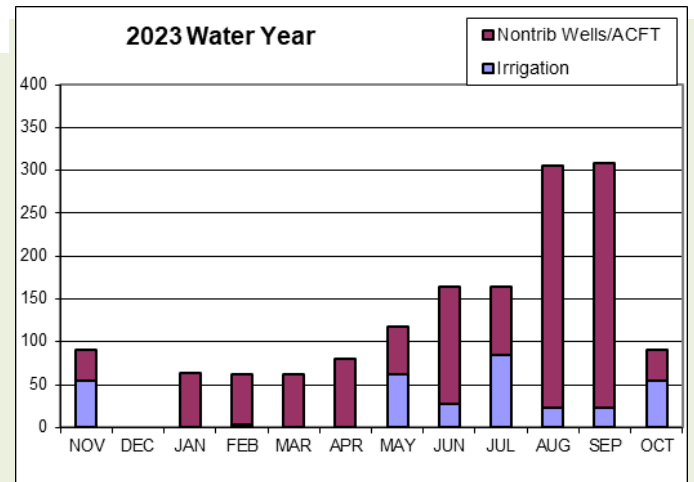
Monthly Precipitation **1.94** **0.18**

Water YTD Precipitation **20.93** **35.70**
Total MG/Water
Year 577.190 402.814

Water Year is from 11-1-2022 through 10-31-2024



YTD 17% Irrigation used



YTD 10% Irrigation used

Water treatment Plant – 87,354,000 gallons/month and the Daily Avg. = 56%, maximum day demand = 62% of capacity. Filter media polit study completed for water plant filters.

Distribution System- Sept. 2024

All Water Samples taken for Sept are good.

IPS Pipeline – Transferred 0 MG in Sept-Normal Operation

(2024 water YTD transfer is 236.638 gallons to the district.)

Water Tanks – Normal Operation

Serena Drive PRV – Normal Operation

Monarch Blvd PRV – Normal Operation

Hidden point PRV – Normal Operation

Zone 4 BPS – Normal Operation.

Meter Readings – Submitted 9-25-2024.

Fire Hydrants – Normal Operation

Water Mains –Normal Operation

Miscellaneous

Generators Water plant. Normal Operation

Work Orders – 38

Failed Inspections – 0.

Emergency call outs - 2

Non-payment shut-offs - 1.

Tag hangings – 12.

Turn off and turn on (normal work orders) – 1.

Final and meter Re-reads – 11

Curb-stop valves/meter pit repairs – 1.

Extra work- Main line work on Monarch has resumed currently.

Collection System

All lift stations are undergoing Kennedy Jenks review.

Lift stations will be cleaned and checked every three months for any Maintenance items.

All Maintenance completed on lift stations.

Lift station # 1 - Normal Operation

Lift station # 2 -Normal Operation

Lift station # 3 – Normal Operation

Lift station # 4 -Normal Operation

Lift station # 5 –Normal Operation

Lift station # 6 –Normal Operation

Lift station #7 -Normal Operation

Lagae LS - Normal Operation

October 22, 2024

Memorandum

To: Nathan Travis, District Manager
Castle Pines North Metropolitan District

From: Greg S. Sekera, P.E.

Subject: District Engineer Report for Board of Directors Meeting on October 28, 2024
Castle Pines North Metropolitan District
KJ Job No. 2446002*GENW

Briefly presented below are the items that we have been involved in during the past month as well as on-going engineering related items.

DISTRICT PROJECTS

Water Treatment Plant Upgrades – There are 3 projects currently in the planning, design or construction phases. The HVAC and Tank Rehabilitation projects have been successfully completed and the assets are in use. Projects in Progress:

- **Liquid Ammonia Sulfate (LAS) Storage and Feed System Upgrade**: CGRS, the general contractor, is actively executing the contract work to upgrade the LAS Feed System. Substantial completion is currently scheduled for this month, October.
 - Status: Active Construction, near completion.
- **Facility Documentation Program**: The KJ Team continues progress through the various phases of the Facility Documentation Program, aiming to capture, document, and develop infrastructure, controls programming, and operational procedures related to the Water Treatment Plant. Active phases include:
 - **Electrical, Instrumentation & Controls Documentation**: KJ has finalized baseline P&IDs representing the WTP's current state. These P&IDs will serve as living documents, updated with each capital project completion.
 - **Asset Management Registry Update**: KJ has started the development of an asset hierarchy that will later be inputted into the asset system AIMS. Our efforts are focused on better information storing and improvement on the current work order process. This phase will be on-going over the next several months.
- **Filter Rehabilitation Project**: KJ is finalizing the pilot report that summarizes the results from the summer pilot. Our hope is to submit the report to CDPHE this month. KJ has also developed our engineering proposal to initiate the full-scale filter bed rehabilitation phase. Our proposal is included in the meeting packet and we will be at the meeting to present the proposal and answer questions. We will begin this project work in November which initially involves procuring the CMAR contractor and preliminary design phase services.

Memorandum

Engineer Report – Castle Pines North Metropolitan District
October 22, 2024
Page 2

Collection and Distribution Projects – Projects in Progress:

- ❖ Lift Station Upgrades – Final design and agency reviews are in progress. CDPHE requires new site applications and design reviews for the proposed lift station improvements. Lift Stations 1 and 5 are in process and CDPHE has been responsive. We expect final approval before the end of this year. We are currently at the 95% design level with plan set A – Lift Stations 1, 2, and 5. Plan set B is at 90% design level.

- Status: Currently in design and agency reviews
- Anticipated Bid: Plan Set A Lift Stations – Q1 2025

Notice of Violation / Cease and Desist Order – No updates. We will continue to provide support and respond to comments and questions from the State.

- ❖ Well Vault Rehab Project – The Contractor, GSE Construction Company, has initiated construction following material and equipment delivery and reduction in seasonal demands and transition to Interconnect Water.

- Status: Construction active.
- Anticipated Construction Completion: December 2024

- ❖ Monarch Water Line Replacement (Phase 1) – The Contractor, ESI, has completed installation of the Phase 1, 16-inch water line. Project close-out, punch list work, and acceptance of the project are pending completion of the final connection and the City's road improvements.

- Status: Close-out – punch list and documentation
- Anticipated Completion: October 2024

- ❖ Monarch Water Line Replacement (Phase 2) – Phase 2A is replacement of the water line from Glen Oaks Avenue to Berganot Trail. Construction started the week of September 16 of this section and is now complete. Phase 2B will be from Berganot to Buffalo Trail and is anticipated by the City for 2025. We are currently at 90% design level for it. Both phases consist of approximately 2,900 feet of new 16-inch water line.

- Status: Phase 2A in Close-out – punch list and documentation. Phase 2B design is at 90% level.

Memorandum

Engineer Report – Castle Pines North Metropolitan District
October 22, 2024
Page 3

DEVELOPMENT PROJECTS

- ❖ JAM Ranch Inclusion Study – *No Update*. Property is located at southwest corner of the Happy Canyon Road and I-25 interchange. We will perform a service feasibility study when requested by the District.
- ❖ New Service Line Reviews – We have continued observations of new water and sewer taps and services in Lagae Ranch and Town Center for conformance to the District standards. We will continue the observations as requests are received by the District.
 - Status: Active on an as needed basis
- ❖ Lagae PA-7 Site – *No new updates for this past month*. The water and sanitary sewer mains and service line stub-outs to the townhome buildings are complete. The Developer is continuing with townhomes, and we are reviewing the meter and service lines as they request. Acceptance of the project for start of conveyance is pending completion of punch work and documentation.
 - Status: Punch list and close out phase
- ❖ Castle Pines Self-Storage – *No new updates for this past month*. Reviewing water and sewer plans for proposed self-storage on 2 Lots within the Lagae Family Parcel at Castle Pines Pkwy and Lagae Road. We have reviewed several plan submittals to date.
 - Status: Developer is working on final approvals from City and needs easements from CPN.
 - Plan Review Status: Reviewed 2nd submittal August 2024